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JANUARY, 1921

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side being a discussion on the Strike Evil on the Land, and how to combat it, also a statement prepared by the Producers' Associations' Central Council (N.S.W.) showing the effect of the above-mentioned Federal Basic Wage on the primary producer. Turning to the practical articles, special attention is drawn to the following:—Registration of Stud Stock ("Talgai"), Scabby Faces and Ulcerated Mouths in Sheep ("Crowfoot"), Forage Poisoning in Stock, Bush Sickness in New Zealand, Large Holdings Subdivision Bill and Closer Settlement in New South Wales, and the Value of Wireless Telephony in the "Out-back." "Fife and Drum" deals with holiday racing in Sydney and Melbourne, Test cricket, &c., and "Gnome" continues his discussion on Engine Knocks in Motor Notes. In stud stock, "H.B." furnishes another article on old-time Shorthorn herds, and a list of all the highest-priced stock sold during the past year will be found very interesting. Innumerable other topics concerning wool, meat, land, stock, &c., are dealt with, and in spite of publishing difficulties, which once again have cropped up as a result of restrictions arising from the maritime strike, we think readers will find the first issue of 1921 a full and interesting one. We take this opportunity of wishing them more settled times and every prosperity in the New Year.

* * *

It cannot be said, so far as Australia is concerned, that the new year has opened auspiciously, excepting as regards the season, which is magnificent almost throughout. In Western Australia there is practically a revolution by the railway employees against the people, and the railway services are almost at a standstill. The unions have reached such a stage of swollen headedness that Government by the people for the people is no longer anything to them. They have for so many years had their demands conceded to them on every occasion that they are now like unto spoiled children, and obey no one. The whole of the coastal shipping has been idle for weeks because a set of outrageous demands by the stewards has not been granted. Arbitration awards are nothing to the unions, unless they get all they ask for every time. The travelling public has been put to untold inconvenience, and thousands have been unable to return to their homes. And what good does it all do? Every strike means lessened employment and misery for many working people. We hear already of one line of steamers which is going out of the passenger service, and retaining only its cargo boats. Its fine passenger vessels will probably be sold to Japan or some other country. Other steamship lines will be forced to register in foreign countries, and make their headquarters in Singapore, Java, China, or somewhere abroad, extending their routes from Australia, and employing crews other than our own. And whose fault will

Editorial Notes.

A good lot of illustrations will be found in this issue, the first of the New Year. They include two pages of New Zealand shows, a beautiful full page picture

The Current Issue.

of farm horses at work in the United States, and another full page of sheep in the Highlands of Scotland, some excellent examples of aerial photography, a droving outfit in the Gulf country of North Queensland, and other pictures from Queensland, New South Wales, and Western Australia. We would also draw attention to a cartoon depicting the burdens of the producer at the present time and the crushing effect of the Federal basic wage. There are numerous valuable articles covering a wide field, included amongst them on the abstract

it be? The unions' every time. They have already been instrumental in closing most of the lead, copper, silver, and gold mines. They have ruined industry after industry, and the result is an increasing army of unemployed. So unless a radical change takes place in the management of these unions, and the moderate and more sensible element takes charge of affairs, the year 1921 does not promise big prosperity for the country. It rests with the workers themselves. This country is magnificent in itself, but has been brought to its present position of stagnation and debt largely through the action of the unions and the professional politician of the past quarter of a century.

* * *

Many years ago, before the New South Wales railways extended as far as they do now, the agitation for the shifting north of the southern border of New South Wales, in order that Riverina might be included in Victoria, was of frequent occurrence, but of late years, no doubt largely in consequence of the Federal movement, the question has been allowed to drop altogether. At the present time, however, it seems likely that it may be revived owing to the bitterness caused by the extraordinary actions of the present Labour Government in New South Wales. There is an impression abroad that the Trades Hall is superior to the interests of the country constituencies, and only cares for the concentration of everything in the city. Consequently, as the Government is recognised as a kind of machine which is worked by the pressure of various buttons at the Trades Hall, and the country residents read of the vast schemes for the construction of the city railway and North Shore bridge, in which they will have neither part nor lot, beyond the privilege of paying their share in increased taxation, we cannot be surprised at those so favourably situated for separation being forced by circumstances to reconsider the question. In this connection a comparison of income taxes payable in New South Wales and Victoria, which was published in the last issue of the "Accountant," the official organ of the Corporation of Public Accountants of Australasia, which we take the liberty of reproducing here, is most instructive:—

Victoria.		Personal Exertion. Property.	
		d.	d.
Where the taxable amount does not exceed £500		3	6
Where the taxable amount exceeds £500—			
£1 and up to £500	.. .. .	4	8
£501 and up to £1000	.. .. .	5	10
£1001 and up to £1500	.. .. .	6	12
£1501 and upwards	.. .. .	7	14
Companies	.. .. .	12	—
New South Wales.		d.	d.
£1 and up to £700	.. .. .	15	18
£701 and up to £1700	.. .. .	16	19 1-3
£1701 and up to £2700	.. .. .	18	22
£2701 and up to £4700	.. .. .	20	24 2-3
£4701 and up to £6700	.. .. .	23	28 2-3
£6701 and up to £9700	.. .. .	27	31
£9701 and upwards	.. .. .	30	38
Companies	.. .. .	30	—

How it is that Victoria manages to run along smoothly with such a low income tax is a matter for further investigation, but the only solution would seem to be that while the southern State is being carefully and economically managed, the northern State is being ruined by bad management and extravagance. In view of the above comparison of income tax figures alone, one can easily understand the revival of the agitation in Riverina to be incorporated into Victoria, and relieved from the heavy liability incurred by being part of New South Wales. There could not a stronger object lesson on the futility of Federation than the above figures supply.

The annual report of the Auditor-General on the administration and finances of the Murrumbidgee irrigation area (N.S.W.) is about the most scathing indictment we have ever seen. The net loss for the year, as shown in the balance-sheet, was £284,567, and the report goes

on to say, after referring to the many reforms suggested, but practically ignored, during the last few years, that the conclusion arrived at has been that it was futile to even make suggestions, let alone to arrest improper expenditure, irregular procedure, or the piling up of unwarranted debts. "Ordinary responsibility and the safeguarding of the public funds have apparently not been realised by the administration. . . . The Water Conservation and Irrigation Commission [the controlling body—Ed.] has attempted to defeat the enactments of the Legislature as to appropriations of money. Several glaring cases have occurred this year. No other undertaking, or department, has so consistently disregarded its obligations under the Audit Act." In his comments, the Auditor-General gives the salient points of the enormous liabilities for capital and working costs involved, and the attendant burdens of interest and loss. At 30th June last £5,136,121 had been expended from various appropriations by Parliament, in addition to £154,570 owing to sundry creditors, making a total capital liability of £5,290,692. To date, a liability of £1,199,986 for interest on capital had been incurred, to which has to be added £65,690 statutory contributions to a sinking fund, making a total of £1,265,677. The net accumulated trading loss to 30th June stood at £121,550. To that has to be added £16,535, remission of Crown dues, and also the eventual loss accruing from the various compensations for misrepresentation. Approximately 400 settlers availed themselves of the provisions of the 1918 Amending Act to apply for concessions on the grounds of misrepresentation, &c. About 200 applicants were granted remissions. The indebtedness in connection with advances to settlers almost doubled during the year, amounting to £405,545 as compared with £210,707 in the previous year. Altogether it is a pretty illustration of what Government administration of a commercial undertaking can run the taxpayers into. We pointed out years ago that the whole concern was purely a philanthropic institution, for which those unfortunate individuals would have to pay. To begin with, we doubt if it could ever have been made to pay by anyone with labour as dear and unsatisfactory as it is in this country, but run as it has been, it certainly never had a chance. The only possible hope of arresting the drift and cutting down the tremendous national waste is to introduce business methods and efficient commercial management.

* * *

The diminution of the population on the land is a serious problem in Australia: Statistics for Queensland in regard

to rural population are not available, but from other figures just published by the Commonwealth Statistician, we see that in the seven years ended 30th June, 1919, that part of the population of Australia, excluding Queensland, engaged in rural pursuits declined by almost 30,000 individuals. The total in 1911-12 was 431,512, and in 1918-19 383,596. This indicates that something is radically wrong somewhere. That a country with such magnificent resources, one of the greatest primary producing countries in the world, should only be able to show such a paltry—and decreasing—rural population after a century of occupation is a reproach that may well cause the world to ask "What is wrong with Australia?" There is nothing wrong with Australia, but two things have been and are responsible for her stag-

nation. One is Government ownership of railways, and the other is the eternal Government policy of catering for city interests, which mean votes, as against the country. The former has prevented the opening up and settlement of vast tracts of productive country, and the latter in conjunction with it as well as a ridiculous policy of protection designed to make an infant nation walk before it can crawl, has made country life to the settler so comfortless and cheerless, and the investment of capital so unattractive that there has been no incentive for development. In fact, there is an ever increasing tendency to "chuck up the land," and either go to the "city" or a different country. This is no exaggeration, but unpalatable facts, and we have got to chew them over. The Australian national drift is something to be pondered.

* * *

Large areas of country in Western Queensland and north-western New South Wales have during recent years reverted—and still are reverting—from sheep to cattle. The reasons are not far to seek.

From Sheep to Cattle.

First, there are the dogs, which take a heavy toll; then labour troubles. The demands of shearers and shed hands are becoming more and more insistent and unreasonable, friction and unpleasantness are continuous. In Queensland the carriers have boosted their rates, and under the present Caucus rule railway freights have increased with monotonous regularity. In New South Wales the unfortunate dog-cursed owners have been unable to get any assistance from the Government in the erection of a dog-proof fence, and, finally, there is the ubiquitous fly, which causes heavy expense owing to the necessity of frequent crutching, spraying, or dipping. Cattle are subject to practically none of these worries, and their owner is not harassed morning, noon and night. But at the same time it is not altogether good for the country. Sheep country that is carrying cattle is not fulfilling its proper role, and is not being put to the best use in that the maximum of production is not being got out of it. That, however, is not the fault of the lessee. Certain factors over which he has no control, and which are enumerated above, have compelled him to adopt the easier course of getting rid of his sheep and putting cattle on instead. It is the place of the Government to see that facilities and assistance are forthcoming for settlers in the far western parts if the maximum of production is to be obtained. As for labour, one would think that even the densest of workers would see whither their foolish course is leading them. Cattle runs mean no work for the shearer, the shed hand, &c. They are obviously closing up their avenues of livelihood, and State relief for impecunious or unemployable workers is just about at its last gasp. If they have not yet realised their position, they will very soon be forced to.

* * *

Quite unexpectedly the Queensland State Government abandoned its bill providing for raising loans by compulsory means, and passed a fresh bill providing

The Queensland Loan.

for a local loan on the voluntary basis. Whether it had any real intention to apply a compulsory bill is not certain; but it grasped eagerly the suggestion of people with an interest in the country that if the expenditure of the money raised were clearly stated, and was unobjectionable, every help would be given to raise the money without resort to extreme measures. The one bill was withdrawn and the other introduced and passed in quick order. True to promise every help is being given by the various interests—Stock Exchange,

Employers' Federation, and other substantial bodies—all of whom have commended the loan to their members. The rate of interest is $6\frac{1}{2}$ per cent. A peculiarity of the position is that the unions are being urged to assist in investing in the loan, and the Act will do good if it induces some unionists to become thrifty. The Government, however, retains the right to introduce the compulsory bill if the loan is not a success, and has actually kept Parliament on a string so that it may be called together at any time, but as a matter of fact of recent weeks it is keeping that fact in the background, having apparently foreseen that compulsion may be a two-edged sword.

* * *

The report of the Queensland Auditor-General on the State enterprises, which was tabled in Parliament in the closing days of the session, is an illuminating document. It shows that with the indebtedness to the Treasurer of £1,335,614, the State stations gave a return of only 1.92 per cent., or £25,600. By combining

Queensland State Stations and Butchers' Shops.

the profit made in the State butchers' shops with the State stations the total return was 4.75 per cent. During the year the stations sold only 5724 cattle as compared with 11,396 in the previous year. The Auditor-General mentions that a statement was submitted to him of the profit and loss account showing what he considered to be an inflation of the values of the cattle, and after discussion with the commissioner arrangements were made for a transfer to the State butchers' branch, thus placing the liability on the latter. The average price of stock on hand after allowing for this sale was £5 6s. 1d. per head, as compared with £4 18s. in the previous years. The meat works at Charleville showed a loss of £1243. It is interesting to note that while the State Government only pays the meat works $3\frac{1}{2}$ d. per lb. for meat, the Charleville works charge the State butcheries 4d. for beef, $5\frac{1}{2}$ d. for mutton, and 7d. for pork. The main point about the whole transaction is that after locking up nearly a million and a-half of money, the Government can only earn 1.92 per cent. in a comparatively good season, without having to pay rates and taxes on the properties and with everything in its favour—and that without putting one additional person on the land.

* * *

Until quite recently there was a marked tendency amongst Lincoln sheep breeders in Australia to sacrifice carcass and constitution for wool, and at

Size and Constitution in Lincoln Sheep.

the leading shows there was a preponderating majority of effeminate, small and weak-backed rams. Within the last two or three years, however, a considerable improvement has taken place, and breeders are realising that if they are to have the great essential of a sound and robust constitution in their sheep, they must first of all possess a good solid frame. We are not, or have not been, alone in this fault. In Argentina apparently it is very noticeable, judging from the comments on the Lincoln exhibits at the recent Palermo show by the judge, Mr. Clifford Nicholson, one of the leading breeders in England. He said in an interview with the rural contributor to "The Review of the River Plate": "One thing I should like to say is that I am quite sure most of your breeders are making a great mistake in losing the size of your sheep; we all agree that a good big one will beat a good little one. The Lincoln is naturally a big sheep with sound constitution, and I was most disappointed to find such a large number of pretty little rams of quite the right type, but with no size

and with very weak feminine heads, showing great lack of constitution. I have never seen a good sire of any breed with a weak feminine head; a ram must have a ram's head, and if a ewe shows a little strength in her head I like her all the better for it. Generally speaking, your wool and cover is good, but I should like to see this beautiful wool and cover grown on larger sheep. It can be done." These remarks are very much to the point, and breeders, not only of Lincolns, but of Merinos or any other breed, should note them well. There is no necessity to run to coarseness, but narrow-backed, weakly animals, with weak heads and necks, no matter how good their wool, are no good to anyone. There is every prospect of a good export trade in Merinos, Lincolns, Romneys, and Corriedales to Argentina. New Zealanders are shipping good consignments, and if Australian breeders, particularly of Lincolns, will continue to regard size and constitution as the first objectives, they should have a share of the trade. There is no reason why they should not do it, and still maintain the good quality of the covering.

* * *

Sir Robert Horne, K.C., president of the British Board of Trade, speaking at a meeting at Glasgow lately, said that there was nothing, in his view, more blighting to the prosperity of the country than Government control. There was nothing which so weakened initiative and enterprise as dependence upon the State. While it was the duty of the State to make the task of everyone as easy as possible, and to provide the necessary facilities behind that, the people must depend upon that spirit of adventure and enterprise which had made this country great. If he had gone into Government as a confirmed socialist, he would have been by this time, as the result of his experience of what Government control meant, the strongest anti-socialist in the country. After referring to the municipal election results and the defeat of the socialists in their determined effort to capture the municipal administration of the country, Sir Robert Horne said the great political questions of the future were bound up in the problem as to whether they should have socialist control in the country or still trust to that spirit of enterprise and the individual. All other questions were things which, compared with that, would have to retire into the background. Every word of this is true. Australia to-day is a monument to the madness of Government control. Unemployment increases rapidly, production is dwindling, and few people care to venture into any new undertaking. Moreover, no one is satisfied except politicians, and strikes abound. How different is the position in Canada, where private enterprise and initiative have full swing.

* * *

Mr. Hobler, Federal Government railway engineer, in an interview in Sydney recently, speaking of the north-west of Australia, said:—

What is meant by "Proper Development." "With proper development, the country could carry a great population, and support numbers of wealth-producing industries, adding immensely to the wealth and revenue of West Australia and the Commonwealth as a whole. A large extent of the country is suitable for closer settlement, and in any developmental scheme or schemes considered this should undoubtedly receive very earnest attention. There is ample room and country for settlers with small means, and for those with large means. The people in these cities have no idea of the extent of what is really a magnificent heritage. The Fitzroy—one of the several great rivers of the north-west—alone drains an area equal in size to Java—and the average annual rainfall on this area is 20 inches."

All very true, but what does he mean by proper development? Does he think that running a Government-owned railway through it would make white people go up to settle there whilst vast areas down south are available. White people never go to tropical countries to settle unless they know they can get labour to work for them, and can get some comforts. No class of labour in Australia shows the least inclination to work in a black man's country, therefore what is there to induce settlers to go up there. All this sort of talk is folly, and the wonder is that the papers which publish it do not at the same time draw attention to the other side of the question.

* * *

A statement was made recently by Dr. Edward Pigott, of the Riverview Observatory, Sydney, before the Agricultural

Committee of the Legislative Council of New South Wales that modern researches contain the promise of discovering a means of forecasting the weather ten and probably fifteen days ahead. He explained how it had been discovered that the sun's radiation was not constant, and that there was a correspondence between its variations and that of the weather. Concerning these things there had been on foot for three or four years a great scheme of research, in which both South and North America were taking part. It was now proposed that Australia should also help. Observations were recorded at Mount Wilson, in California, and in Chile, and a third observatory was to be started in Egypt. The Sydney station, south of the line, would be complementary to that at Mount Wilson, north. If Australia took part in these researches, therefore, she would, with the three other stations, complete the parallelogram and round off the scheme. This is much more than merely interesting to farmers and pastoralists in a country like Australia. Many a man, had he been in possession of such knowledge as is now promised him, would in the past have avoided heavy losses, and in some instances absolute ruin, for it is one of the tragedies of pastoral life in this continent that men have given up the fight against drought, thereby losing a life's work, only a day or a few days before a saving rain came. Dr. Pigott has no faith in the long distance forecasting which certain optimists believe possible, forecasting weather, that is, two or three years ahead, but there is nothing fantastic in the claim that a fuller knowledge of the sun and its activities, the great controlling factor of the world's existence, should enable us to predict the weather a week or two in advance.	Weather Forecasting.
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Good Roads and Motor Transport.

Recognising the important part played by good roads in the development of the country, the United States Federal Government has for some time subsidised the States in their highway building plans to the extent of 50 per cent. of the cost. In 1916 an appropriation of £15,000,000 was made available for this purpose, extending over a five-year period, but it was found insufficient, and in February 1919 the grant was increased by £40,000,000, to be available over a three-year period. At the end of last June there were actually under construction 15,944 miles of road, and in addition approximately 5500 miles have been completed since the inauguration of the Federal aid plan. That the highways are intended to last is evidenced by the fact that 60 per cent. of the total appropriations have been spent on such roads as bituminous concrete, Portland cement concrete, or brick.

It is estimated that at the end of 1920 there were 8,000,000 registered motor vehicles in use in the States, of which over one million were motor trucks. Here we see the direct advantage derived from firm surfaced roads. More than 25 per cent. of the motors registered were described as farm owned, a wonderful proportion to us in Australia, with our oft-times impassable bush tracks and so-called main roads, which frequently consist of a long series of pot holes.

Review of Pastoral Situation.

New South Wales.

SYDNEY, 10th January, 1921.

The new year opens with another almost general rainfall, particularly heavy in Sydney and in other parts of the coastal area. Light to heavy rain has fallen over the western, central, and southern districts, a number of places receiving over an inch, while heavier falls ranging up to 200 points at Albury, Enngonia, and Bungendore have been recorded. During the latter part of last month a great heat prevailed over most of the State. This has been followed by a cool change, temperatures being mostly in the sixties instead of in the eighties to one hundred and over in parts. At the end of last month the far north-west received some good storms, over 2 in. being recorded at Tibooburra. The pastoral season everywhere is magnificent, and feed is in abundance—too much if anything, on account of conditions being so favourable to blowflies and worms. Over the grain area the rain was not wanted; in fact, some alarm is being felt amongst the wheat farmers, who are mostly in the middle of harvesting. This wet break so soon after the one a week or two earlier will probably further injure the quality of a percentage of the grain.

Mr. R. M. Pitt, managing director of Pitt, Son and Badgery Limited, a recognised authority in the industry, estimates a very successful summer lambing, and also a big drop in the autumn and winter, placing the total at from 12,000,000 to 14,000,000. He says: "We can expect a record double lambing. In all my experience I have only known one double lambing to be a success generally in the State. This time will be the second. Not only will the ewes rear the summer lambs, but the sheep will be in great condition for the autumn and winter lambing."

Land Alienation.

The progress of land alienation is indicated by statistical compilations incorporated in part XIII. of the Official Year Book, which is to hand from the Government Statistician. The returns reveal that to the end of 1861 7,146,579 acres of land within the State had been alienated, the total having been swollen to 82,193,177 acres by the close of the year 1918-1919. Alienations effected in the latest year for which the figures apply were heavier in total than were those for either 1918 or 1917, being 847,087 acres as compared with 245,027 acres and 376,954 acres respectively. For this impetus the need for facilitating the settlement of returned soldiers would be largely accountable.

	Total		Alienated Area placed	
	Alienated.	Conditionally Purchased.	and in Process.	beyond State C'trol.
To 30th June.	Acres.	Acres.	Acres.	Acres.
1911	38,501,167	15,614,036	54,115,203	79,467,514
1916	41,172,383	18,315,095	59,487,478	81,531,984
1917	41,549,337	18,693,429	60,242,766	81,367,189
1918	41,794,364	19,225,738	61,020,102	81,574,875
1919	42,641,451	19,435,807	62,077,258	82,193,177

Areas under leases, with right to convert, represented, at the close of 1918-19, 20,115,919 acres, or 438,852 acres less than the total shown in the same category twelve months earlier.

The Unemployed.

The Labour Council has denounced the Government's attitude towards the unemployment question. At a recent meeting it was reported that a deputation had waited on the Minister urging that something should be done to relieve the distress among the unemployed. The reply was given that nothing could be done by the Government on account of the difficulty in obtaining money. It was stated that there were 15,000 unemployed in Sydney. The council decided to draw up a manifesto explaining to the "workers" the attitude of the Labour Government towards the unemployed. Since the foolish stewards' strike commenced the number of unemployed must be more than doubled. It is no use blaming the Government, the fault lies in "Labour's" own policy in

forcing through absurdly high basic wages and crippling private enterprise. To absorb unemployed means a reversal to business methods.

Travelling Stock Routes.

Since the break-up of the drought the T.S.R.'s. have in many parts gone from bad to worse; particularly is this so in the north-west. Noxious weeds of all sorts have so flourished that now they are in possession of long stretches of the routes. Watering places have been also neglected; it is neglect all along the line. "I have never seen such a crop of noxious plants," said a Wee Waa grazier recently. "At the present time you will see Bathurst burr, Noogoora burr, black, variegated, and Chinese thistles, besides a thistle new to us, and numbers of other strangers. We have never seen such growth." So serious has the menace become that many stockowners hesitate before putting their sheep on the roads. It is only necessity that drives them to it.

To contribute to the graziers' anxiety, there is a very strong feeling among them that the railway rolling stock is far short of requirements for an emergency, such as a drought. How far-seeing graziers feel about it all is summed up in this remark by one of them: "Unless there is a big increase in the rolling stock of the Railway Department, a restoration of store stock rates, and a big improvement in the T.S.R.'s, stockowners will be more seriously handicapped than ever in shifting stock about, and the next drought will see big losses that, but for this handicap, would not occur. It is up to both stockowners and the Government to do their share, for the sake of increased production and prevention of loss."

Wheat Guarantee.

The Minister for Agriculture, discussing the wheat payments question at Wagga a few days ago, said: "It is the most worrying and most disappointing experience I have had since I took charge of the department. I have done everything possible to meet the requirements, and have not yet given up hope of success. It will not be possible to pay cash; we could not get the necessary £5,000,000 in the present state of the money market, but we shall be able to do something. I am to confer with all the financial authorities concerned, and I think it will be possible to arrange for the issue of acceptable certificates."

Questioned as to the Government's failure to get the money, the Minister said that under pressure from the Parliamentary Opposition and the Country Party at the time of the censure motion, just before the House of Representatives adjourned, the Prime Minister was forced into a new position in having to rearrange his financial programme to meet the exigencies of the Federal demand, and he withdrew his undertaking to the State. Meanwhile the whole financial position changed. Banking facilities were less and less convenient, and finally impossible. The situation was one that no Government, and certainly no private institution, could control, and that was all about it. "Anyhow," he said in conclusion, "disappointed as we naturally are, there is a lot of money to come to the farmers by April. The Federal Government will by that time pay out £30,000,000 to wheat growers, and there will be no doubt about it. Mr. Hughes has completed his arrangements for that, and I hope to do something satisfactory in the name of the State Government after the financial people interested have met to discuss the situation."

Starving Stock.—Railway Rebates.

The Railway Commissioners state that, in consequence of the improved condition of the country, due to the recent rain, the rebate on starving stock on the forward journey and on fodder for starving stock has been discontinued.

Stock which have already been conveyed by rail under starving stock conditions will be returned to their original pastures under the returning starving stock regulations, provided the usual conditions are complied with.

Live Stock Markets.

Since last month's report there have been seven sale days at Homebush, during which the following changed hands:—215,156 sheep and 15,674 head of cattle. The closing quotations were:—

Sheep:—Prime Merino wethers to 34s., extra prime to 38s., good to 30s., prime ewes to 29s., extra prime to 32s. Crossbred wethers, prime, to 32s., extra prime to 34s., good to 29s.

Cattle:—Prime heavy bullocks to £22, extra prime to £25, medium to £11, prime cows to £17, good to £13.

Victoria.

MELBOURNE, 10th January, 1921.

Seasonable weather has been experienced since the date on which this letter was written last month; extreme heat (the hottest day of 1920 was experienced on 23rd December), thunder storms and cool changes. The rainfall records for December were rather below the average, which was an advantage. On 2nd January a very heavy storm visited the State, over 3 in. being recorded in the south; it was not so heavy in the wheat belt, and as the storm lasted only a day, and was followed by fine weather, with drying winds, the damage to the wheat crop was not great. Mr. Oman, Minister for Lands, and Victorian representative on the Wheat Board, is of opinion that the loss was slight; in fact, he is very optimistic about the harvest. Early in the month he stated that latest reports indicated that the more liberal estimates as to the yield would probably be exceeded by 3,000,000 bushels. He also stated that the shipment of grain was proceeding satisfactorily.

The Commonwealth Meteorologist, in a review of the weather over Victoria for 1920, states that after a most unpromising beginning the year has proved a good one owing to the favourable distribution of a practically normal annual rainfall, so that the agricultural growing period included all the months in which the falls exceeded the average. A summary of the annual rainfall for the various districts shows that the mean for 1920 varied but little in each district from the average; the percentage departure from normal in the Mallee and northern country was plus 11 per cent., whereas in the Wimmera and Western District the departure was minus 6 per cent. and 7 per cent. respectively.

Primary Production.

The Government Statist, Mr. A. M. Laughton, has issued a statement dealing with the value of the State's primary production. The value of cultivation, not including dairying and pastoral, for the twelve months 1919-20 was £21,884,000 (in round numbers), as compared with £16,362,000 for the previous year; for 1919-20 the value of the dairying and pastoral industry was £25,949,000, as compared with £25,796,000. The total value of primary products for 1919-20 was £55,529,000, as compared with £47,889,000 for the previous year.

Railway Extension.

The residents of Colac have been moving for some years for a spur line to connect up with Dreeite, on Lake Corangamite. Last month a party of Farmers' Union representatives in the State Parliament visited Colac and inspected the proposed route of the railway to Dreeite. The country inspected is fast becoming closely settled, mostly with dairy farms, and at Dreeite itself the Closer Settlement Board has recently thrown open a number of blocks, averaging 100 acres in area, for soldier settlement. The Railway Standing Committee, it is anticipated, will visit the district shortly.

Soldier Settlement.

Before the close of the State Parliament for the Christmas holidays the Legislative Assembly passed a Land Act, which is intended to facilitate soldier settlement on Crown lands.

The Minister of Lands, in moving the second reading of the bill, said that at present there were 45,000 tenants who were purchasing or otherwise holding Crown lands. There were 12,000,000 acres of Crown lands in the State, principally in the Mallee, East Gippsland, and the north-east. Provision had been made for 75 per cent. of the eligible soldier applicants for land, and in view of the stringency of the money market, it was considered that some of the balance should be settled on Crown lands, which could be done with profit to them and benefit to the State. It would be necessary to construct railways and roads, and to provide water supply. If the land had had roads it would already have been made available for settlement. It was because it had no roads that it was in the hands of the Crown. The Government would improve the land so that it would become

almost immediately productive after settlement, and the settler would thus have a reasonable chance of making good.

The Closer Settlement Board have received from their inspectors individual reports on each of the soldiers settled on land under the board's control. In the opinion of the inspectors the prospects of 53.2 per cent. of the settlers are good, 41.3 per cent. are fair, 4.1 per cent. are doubtful, and 1.4 per cent. are failures. A statement issued by the board shows that up to 31st December, 1,419,689 acres had been purchased for soldiers' settlement for £10,321,676.

Live Stock Markets.

During the month four sales of sheep, lamb, and cattle have been held at Newmarket, with a total offering of 138,760 sheep, 126,100 lambs, 11,300 cattle, as against 141,210 sheep, 135,800 lambs, 8325 cattle for the previous month.

The following are the prices at the sales held on the 5th inst.:—Prime crossbred wethers, 32s. to 35s.; prime crossbred ewes, 25s. to 29s.; best Merino wethers, 28s. 6d. to 31s. 6d.; prime lambs, 28s. to 32s.; prime pens of bullocks, £23 to £25; prime pens of cows, £13 15s. to £16.

Improving Railway Service.

The chairman of the Railways Commissioners, in an appeal to the public for energetic co-operation with the department in extracting more and better service from the existing equipment, says:—

We are taking every practical step to strengthen the traffic organisation. But there are limits to what the staff can do without your aid.

The several simple ways, then, in which we ask you to join with us in giving quick and smooth despatch to your business are:—

Those Sending Freight.

Give a written and distinct order for all trucks required.

Do not order more trucks than are actually needed at a time. If you do, the other fellow goes without, and the use of those trucks is lost for the time being.

Pack closely and carefully. Load to fullest authorised capacity of the truck, and, as far as practicable, keep all consignments for the same destination station together.

Limit despatches to as few days of the week as practicable, and select a specified day for consignments to be forwarded to a particular station.

Those Receiving Freight.

Don't make a warehouse of trucks or goods sheds. If you do, you deprive the other fellow of their use.

Unload immediately the goods are placed for delivery, and remove the same from the railway premises at once.

Avoid demurrage and storage. The revenue obtained from such charges is not desired. It is the use of the trucks and of the space which the goods occupy that is urgently needed.

The above are fair requests, and if the public will do their best to comply with them, they will be doing themselves a "good turn."

Notes.

The Chairman of the Water Commission has issued a warning to those persons who, without having obtained the necessary permit, are illegally diverting water from streams. Persons transgressing are notified that steps are being taken to proceed against them under the Water Acts.

The manufacture of wire netting at Pentridge is proceeding steadily, and it is expected that sufficient supplies of raw material will be obtainable in the future to keep the factory fully occupied. There has been a steady demand for netting during the past eighteen months, but it has been difficult at times to meet the demand. It is expected that in the coming year the factory will be able to supply all orders. The Public Works department distributes this prison-made netting to landowners through the agency of shire councils. One-tenth of the price has to be lodged as a deposit, and the balance paid over a period of nine years, with interest at 4 per cent. per annum. A 50 per cent. rebate is allowed on the cost of netting erected adjoining unoccupied Crown lands.

The Melbourne Woolbrokers' Association announce that in view of the great increase of late years in the cost of handling grain, it has been found necessary to increase their charges, and from and after 1st January next the following minimum charges on all grain received by their members for sale will be made, viz.:—Commission, 2½ per cent.; for receiving, weighing, and delivery, 3d. per bag, and if re-weighed after sale, 6d. per ton additional; re-bagging, 4d. per bag, plus bags at cost price; storage, 14d. per bag per week or part of a week, with three months' free storage if received between 1st December and 31st March each season,

and one month free between 1st April and 30th November; advertising, catalogues, and sale expenses, 2s. per cent.; insurance, 1s. per cent. per month; with cartage (optional) at current rates.

The Chamber of Agriculture has for some time been endeavouring to persuade the State Government to restore subsidies to agricultural societies on the same lines as obtained previous to the war. The Assistant Minister for Agriculture (Mr. Angus) has recently notified the secretary of the Chamber that whilst the Government has a most sympathetic feeling towards the request, it has the greatest difficulty at the present time in finding financial provision to carry on the ordinary requirements of the Government, and is, therefore, forced to postpone the revival of the subsidies for a year or two.

Queensland.

BRISBANE, 7th January, 1921.

SOUTH.

In the pastoral districts the rainfall for December was satisfactory in that it continued the good results of previous rainfalls, but in the farming districts a dry spell set in and affected the maize crop to some extent, and the sugar crops in the central and south coast divisions. However, since the end of the month some of the farming districts, and especially those on the Darling Downs, were visited by rain. Exceptionally high temperatures have been the rule in all parts of the State, and this fact has tended to dry off herbage. Nevertheless the grazing situation is most satisfactory; there is good grass to carry stock on.

Mr. John McDonald, one of the assessing commissioners of the Lands Department, recently returned from a visit to the south-west, and stated that the country has never smiled as it is smiling at present. The grass is feet high, the rivers are running, and the lakes are full of water after being empty for years.

The Stock Market.

After the slump in prices following on the lack of demand in New South Wales, the stock market in the south-west of Queensland temporarily revived, but it fell again. The impression is that there must be a downward tendency for some time, and that lower values must be expected. A lot of considerations enter into that conclusion. It is believed by stockowners that the only chance of recovery is for the banks and financial institutions to be more liberal with property-owners across the border who desire to stock up. At recent sales at Charleville no bid was obtained for 11,000 wethers, and a mob of cattle sold about the same time got only slack bidding, most of the stock being withdrawn. A great number of stock are on the move. Fortunately the routes are in excellent condition for travelling. There are still some cattle crossing the border southwards.

Four sales were held at Enoggera during December, a total of 31,500 sheep, 2675 lambs, 3660 cattle, and 363 calves being offered.

The following are the latest quotations:—

Three-quarter to full woolled Merino wethers, 19s. 6d. to 31s.; half-woolled Merino wethers, 17s. 3d. to 25s. 3d.; quarter-woolled Merino wethers, 14s. 6d. to 28s. 6d.; full woolled crossbred wethers, 25s. to 27s.; half-woolled crossbred wethers, 16s. 6d. to 29s. 9d.; prime heavy lambs, 24s. to 26s.; good lambs, 16s. to 18s.; light lambs, 10s. to 14s.; prime extra heavy bullocks, to £21 15s.; prime heavy bullocks, £17 to £18 10s.; good bullocks, £15 to £16 15s.; light bullocks, £13 10s. to £14 15s.; prime extra heavy cows to £16 5s.; good cows, £10 to £12.

The Wheat Crop.

The wheat crop, especially on the Darling Downs, is proving to be a record in extent and yield. Not for many years have the farmers had such a return. No details are yet available, but it is fully expected that the total will be between three and four million bushels. A local wheat pool under the auspices of the Commonwealth Government, but managed by the State Government, has been formed. The guarantee of 9s. per bushel will give the farmers a fine return and enable them to make good some of the losses of the immediate past disastrous years. The yield will be so good

that Queensland for once will not have to import wheat to meet her own requirements. A first dividend of 2s. 6d. per bushel is expected to be paid on 14th January.

Mooraberrie Case.

The fees charged in fighting the Mooraberrie cattle case were referred to several times in Parliament. In this case the Government prevented Mrs. Duncan from sending her cattle across the border for marketing, and commandeered them on the plea that the meat was required for Imperial purposes. The fees charged by Mr. Ryan and others who went to England to fight the case before the Privy Council amounted to £13,800. It was argued that the fees could be more properly charged against the State Government than against the Imperial Government, and that they should come out of the embargo fund, which is now in credit £39,000. This was obtained by levying a fee on stock crossing the border while the embargo was applied. Incidentally a demand has been made that this money should be refunded to owners of stock. No satisfaction was secured from the Government.

Land Selection.

The annual report of the Lands Department shows that the area selected was the highest since 1914, and gives an increase of 772 selections, 1,400,000 acres and £3790 in rent on the previous year. Many selectors were unable to pay their rent, and had to be given concessions, though the provision was not availed of to the same extent as in the previous year. The area in process of alienation was 9 million acres, while the area already made freehold was 16,800,000 acres. The alienation of land has ceased under the present Government, which has substituted perpetual lease. A little over 2 million acres are held under this tenure now. Under pastoral occupation there are 211,000,000 acres, under occupation license 36,500,000 acres, and under grazing and scrub selection 76,600,000 acres. The gross amount of land held under pastoral lease and occupation license was 386,000 square miles at rents amounting to £375,000. This area was less by 8613 square miles than the area held in the previous year, while the rent was £11,252 greater. The average rent was 19s. 5½d. per mile. The rents paid for pastoral occupation represented 98 per cent. of the amount demanded.

CENTRE.

Very high temperatures have been the rule in the central western districts, but the pastoral situation does not cause any worry from the grass and water point of view—only in respect to blowfly in sheep. The rainfall during the month, except in the early part, was scanty. It might be expected that the storm period would have produced more towards the end of the year. The wet season has not yet set in. On the coast the rainfall has been below the average for December.

Cobb and Co.

General regret was expressed in Queensland at the announcement that Cobb and Co. was closing down its coaching services. The company's coaches had been associated with the internal life of Australia for a great stretch of years until it was regarded as part of it.

Stock on Country Roads.

Many local authorities complain of the amount of trespassing that takes place on roads. Some of the councils set themselves out to deal with the trouble. The Fitzroy Council recently took action, and in one month impounded 256 head.

State Stations and Butcheries.

In the Legislative Assembly the Minister in charge of State Enterprises (Mr. Fihelly) stated that the number of fat bullocks sold from the State stations during the years 1917, 1918, 1919, and 1920 was 1680, 13,280, 10,363, and 20,367 respectively. No store bullocks were sold either in 1917 or 1920. In 1918 3115 store bullocks were sold, and in 1919 the number was 1020. The number of fat bullocks actually sold through State butchers' shops as fresh meat was as follows:—1917, nil; 1918, nil; 1919, 703; and 1920, 1962.

NORTH.

The rainfall in the peninsula has been seasonal; it has been above the average for December. In the Carpentaria, however, it has been below the average. In the first part of the month a fair amount of rain fell in the districts abutting the border of the Territory and in nearer western localities. The coastal district had two spells of rain, but the precipita-

tion was not uniform. The pastoral situation in the north is good.

The Gulf Country.

Many complaints are being made concerning the isolation of the Gulf country. Some time ago the A.U.S.N. Company withdrew from the service, which it had conducted for very many years, and the Government was compelled to purchase a steamer so that the residents might not be quite cut off from the rest of the world. The steamer is not wholly suitable. The season has been good, and the prospects for the cattle stations are excellent, but the progress of the district is hampered by the want of communication. The Government has a proposal for railway connection, but it must be a long time before the requisite money can be raised to face so great an undertaking.

Sugar Industry.

The sugar crop, as expected, has turned out to be somewhere in the neighbourhood of 162,000 tons. Most of the mills have ceased crushing, but the Babinda mill would have gone on well into this month if it had not been for a vicious strike promoted by certain of the men, apparently against the wish of the majority, who were not morally strong enough to resist them and their epithets of "scab." As a result it is estimated that there will be a loss of £40,000 to the mill and the farmers, as some of the cane is in a state of decay, having been cut in anticipation of crushing.

Everything points to a record crop in 1921, as the areas planted have been very large.

Rates on State Stations.

The holdings resumed by the Government for State stations do not pay rates, though a promise was made that the Government would meet the local authorities in this respect. A sum of £47 was recently paid in respect to Lyndhurst and Buckingham Downs, but part of it was only an adjustment in connection with the purchase of the latter property.

Stolen Horses.

An extraordinary incident occurred at Townsville recently, when a number of horses belonging to merchants were reported stolen. The police followed the tracks for thirty miles towards the boundary of Dotswood holding, and the horses were found in gorges fifteen miles apart, where they had been planted. They had been driven hard. A number of other horses which had been reported lost previously were also found.

Notes.

A number of horses have been shipped from Townsville to India. The "Chinawarra" recently took 300 head.

Some graziers in North Queensland are consigning wool direct to London, as was done on a fairly large scale before the war.

South Australia.

ADELAIDE, 6th January, 1921.

The rainfall for the past month was a fitting termination to what proved to be one of the wettest years on record. Following a severe heat wave, which for three days prior to Christmas Day gave shade readings at many places throughout the State of 110 degs., a downpour took place on the 28th, and heavy rains were experienced throughout the State. Reviewing the twelve months' rainfall, the Weather Bureau points out that at many stations, chiefly in the north, the excess rain over the average ranged from 5 to 10 in. The first five months of 1920 were exceptionally dry, and the outlook towards the end of May was beginning to cause grave anxiety to stockowners and wheatgrowers. When, however, the change came, it was definite and prolonged, and every month provided its full quota of moisture, even December maintaining the average monthly fall. It was in every respect an exceptional season for the last seven months of the year, and practically all over the State there is an abundant supply of water, grass, and herbage, while the hay and wheat crops have given magnificent returns. The new year came in with a deluge, and from 1 to 2 in. of rain fell practically all over the State. This, it was feared, might do some damage to the wheat crops, but with few exceptions

the reports which have come to hand indicate that very little harm was done. The June to December period will long be remembered as standing out well on its own, since the rains came at regular and opportune periods, and although in some districts the dry feed will not be improved by the latest falls, the summer months have been entered upon by stockowners and farmers with light hearts.

The Rural Position.

There is a good supply of fat stock all over the State, and the only regret is that there are not more cattle and sheep available to take full advantage of the plentiful supply of feed. Fat cattle are on the move from practically every pastoral centre, and large supplies are being trucked long distances through Adelaide to Melbourne, while some of the stations which usually supply Adelaide are diverting stock to Sydney.

Reports from all the grain-growing centres adopt quite an optimistic tone, and the view is taken that pre-harvest estimates are likely to be exceeded. As these were in the neighbourhood of from thirty to thirty-five million bushels, it is now thought that the total yield for the State will be something over forty million bushels, the bulk of it having been harvested in a good condition, and providing a splendid sample of fair average quality grain. Wheat is now flowing in a broad, deep stream to the numerous outports with which this State is favoured, and it is expected that oversea vessels will be loaded from quite a number of outports this year. There are about eight ships loading at the present time at South Australian ports, and exports for January are expected to reach a total of 100,000 tons. Freight has been arranged from this State for the first three months which will tax the full capacity of the railways to carry the necessary supplies, and the policy is to ship the wheat this year as quickly as possible in order to avoid stacking charges and losses incidental to stacking. If these plans can be carried out, it will mean that within the next few months a large amount of money will be credited to this State as the result of its grain shipments alone, and this should have an excellent effect on State finances and banking exchange.

Land Settlement.

The Minister of Lands reports that considerable progress is being made with land settlement in various directions, and this particularly applies to the valley of the Murray, where the soldiers' settlements so far have been a pronounced success. He has lately concluded arrangements for the purchase of 10,000 acres from Messrs. G. T., R. T., and A. Melrose, being a portion of their Rosebank property, and negotiations are in progress with other large landowners who have indicated their willingness to sell a portion of their holdings.

Cattle Versus Sheep.

The reports from the far north and from the West Darling country, in which South Australians are so largely interested, indicate that unless something can be done to check the southward movement of the wild dogs, the country hitherto devoted to sheep will be set aside for cattle. This particularly applies to the West Darling country where, owing to the neglect of the Government in Sydney, which seems to give little thought to the north-western portion of that State, the dogs are coming in over the Queensland border, and rapidly distributing themselves southward. If this movement should continue, there will be very little sheep raising west of the Darling within the next few years. The stockowners have asked for a check fence to be erected east and west, connecting with the South Australian border fence, but up to the present time the Government in Sydney cannot be persuaded to give this important matter serious consideration.

Pleuro.

The Chief Inspector of Stock recently reported an outbreak of pleuro in the north, and over 900 cattle have been inoculated. The cattle were mainly stores from Queensland. There were further outbreaks in other districts, but the disease seems to have been promptly checked by the officials.

Live Stock Markets.

The last live stock markets were held during Christmas week, and the next markets take place next week. There was a record supply of cattle for the Christmas sale, and there was a very

large attendance of buyers, including representatives from Melbourne. The market was strong throughout, prices all round showing a higher tendency. Sheep were also in good demand, and the high prices which characterised 1920 were well maintained. Quotations closed on the following basis:—Cattle: Prime bullocks, £23 to £26; good, £17 10s. to £21; prime cows, £14 to £17 10s.; good cows, £11 to £13 10s. Sheep:—Prime Merino wethers, £1 16s. to £2; good Merino wethers, £1 12s. 6d. to £1 15s.; prime Merino ewes, £1 12s. to £1 16s. 6d.; good Merino ewes, £1 7s. 6d. to £1 12s.; prime crossbred wethers, £1 15s. 6d. to £1 17s. 6d.; good crossbred wethers, £1 12s. to £1 15s.; prime crossbred ewes, £1 12s. to £1 14s. 6d.; good crossbred ewes, £1 16s. to £1 11s.; prime lambs, £1 9s. to £1 13s.; good lambs, £1 6s. to £1 9s.

Western Australia.

PERTH, 4th January, 1921.

Parliament is dead, deceased, defunct, and died unwept, unhonoured, and unsung. This may seem severe criticism, but it is essentially justified, principally because this lately expired Parliament went in on a wave of Nationalism, and with a promise to "stop the rot" in the State's finances. Instead of doing so it has doubled the deficit, which is now at the monumental total of nearly £5,000,000, and the monthly accretions of over £100,000 come along with mathematical regularity. If it were not that the Labour party is just as culpable as the Nationalists, there is little doubt Labour would get another chance of messing things. The session, which closed on the day before Christmas, was distinguished for nothing but negatives. Certainly the Government put on a super tax of 15 per cent., but did nothing to economise, and goodness knows there is plenty of room for economy. Per contra, they have adopted the line of least resistance, and conceded demands that mean a great addition to the burdens of the producers. Then they have been tampering with the equity of pastoral leases, and have practically altered existing contracts, inasmuch as power has been given to exact increased rents in certain circumstances. It is palpably a temptation purposely created for impecunious Treasurers, who have no principle of finance except to take more from the taxpayer.

Bulk Handling.

But perhaps the worst blunder was the slaughtering at the last moment of the two enabling bills in connection with bulk handling of wheat. Briefly, the Commonwealth had been induced to pass a measure to subsidise local effort to the extent of £550,000. The farmers of the State had formed a co-operative company, in which they were to subscribe £300,000, thus forming a constructive capital of £850,000. Good progress had been made with the scheme, a large proportion of the shares had been applied for, and it only remained for the Government to pass certain legislation to facilitate matters with the Industries Assistance Board and the Agricultural Bank, to which State institution many of the settlers were mortgaged for advances. It was a simple enough proposition, for the shares in the Co-op. would be an asset, and bulk handling would be a means of securing a cheaper method of marketing their grain. Obviously the scheme would be a great advantage to everyone except the lumpers and the members of the A.W.U., and everything possible should have been done to get the necessary legislation through, but at the last moment it was sent on to the Legislative Council, which House preferred to shelve it rather than rush it through. Technically it was postponed till the next sitting of the House, but as that is not likely to take place inside eight months, it means that bulk handling has been indefinitely shelved, and our producers are the sufferers.

Loyalty versus Disloyalty.

The Kalgoorlie election was a pretty brazen attempt by the disloyal elements in our midst to win success for their designs by getting one of their number indorsed by the electors. Mr. Hugh Mahon, who from the outset of his career could only get into public life by attaching himself to the Labour party, had been ejected from the Federal Parliament for viciously maligning the British Empire, and was backed by the O.L.P. and all the seditious segments in that party in the effort to secure his re-election. If they had

won it would have been a triumph for anti-British conspirators and a humiliation for the whole of the loyal people of Australia. The fight was intense and bitter, a dozen of the ablest and cleverest of the junta agents being sent over from the east to persuade, or trick, the voters into making their cross for Mahon, but with all their cunning endeavours to make black look white, and although money was freely spent—not by Mahon himself—that insult to loyalty was beaten thoroughly by over 400 votes. Seeing that he was returned at the general elections by a majority of 700 odd, it is clear that he had a loss of over 1100 votes. Nor is that all. In the selection ballot prior to his last by-election he was beaten by ex-Senator Needham, who scored 1561 votes to Mahon's 1075. Thus the O.L.P. itself was turned down by a substantial majority. Needham, however, pulled out—why, can be guessed—and allowed Mahon to have the nomination and defeat.

Industrial.

Once more the Christmas season has been signalised by an irritating and probably a disastrous strike. Such unions as are associated with what are known as "public utilities" have developed a habit of presenting the pistol just as the holidays are approaching, evidently choosing that period for tactical reasons. Last year it was the tramway men, and this year it is the railway enginedrivers and firemen. Notwithstanding that these men have received an average increase of £1 per week all round during 1920, they are now demanding a further increase of 30s. a week. At present the top grade enginedrivers receive 20s. 4d. for eight hours, and 25 per cent. additional for overtime. Now they want 25s. for seven hours, and 50 per cent. overtime! They are the best paid men in the Government service, and have been quite satisfied in the past, but the agitator and a malign but underhand influence are said to have been at work to bring about this crisis, which will involve 7000 other railway employees, who do not want to come out. Of course, the women and children will be the greatest sufferers if the struggle is prolonged, but the loss and inconvenience to the community at large will be incalculable. Yet everyone hopes the Government will not capitulate.

Tasmania.

LAUNCESTON, 4th January, 1921.

A fine general rain, which began on New Year's night, has had a great effect in freshening up the country. The pastures were drying off, especially in the south and midlands. As the fall reached about 1½ in., the ground received a good soaking. The late crops will be considerably benefited. A general start has not yet been made in cutting wheat and other grain crops, and the rain should result in substantially swelling yields.

Pastures are still remarkably good, particularly in the northern half of the State, and with the periodical rains with which the summer has commenced, they look like holding out well. Stock are in excellent condition, and the dairying season is a prolific one.

Hay cutting has been completed, but the work has been hampered by the scarcity of binder twine. The average yield has been good, the best crops giving about 4 tons.

The wheat crops are maturing well, and as a large area has been sown the total harvest should be the largest for many years.

Fat Lamb Trade.

The frozen lamb industry makes very slow progress in Tasmania. Operations are very limited, and though orders have been received, the supplies are not available to fulfil them. So far farmers have not taken up systematically the raising of lambs for export.

Poisoning Rabbits in Summer.

The Chief Inspector of Rabbits has been conducting demonstrations to show that rabbits can be poisoned even when feed is plentiful like the present summer season in Tasmania. A free feed of carrots was given, and then the carrots with strychnine, and 176 dead rabbits were picked up in a furrow under a mile in length.

New Zealand.

(FROM OUR OWN CORRESPONDENT.)

CHRISTCHURCH, 1st January, 1921.

AUCKLAND.

The northern parts of the province as well as the city were visited a fortnight ago by heavy gales, which did some damage. In the southern parts of the province a splendid season is being experienced, and the supply of milk at the dairy factories is exceptionally heavy. Everywhere there is an air of prosperity in the farming community, and with big cheques coming in for milk and butter fat, purchasers of high-priced land are satisfied with their position. As the Auckland province relies more upon dairying than sheep raising, this part of the Dominion is not feeling the low price of wool as is the case elsewhere. Fat cattle have tended to ease in price during the month, while mutton is in short supply and firm, and fat lambs have sold well for local consumption. Very few store sheep are offering, but there is a fairly strong demand. At the time of writing heavy rain is reported in Auckland.

Improving Dairy Stock.

At a meeting of the Waikato sub-provincial branch of the Farmers' Union, held at Hamilton last week, motions urging that all bulls should be inspected by a Government veterinary surgeon before being offered for sale, and that farmers selling cows on account of unsoundness should make the fact known, were carried. During the course of the discussion Mr. S. Lye said that many undesirable bulls were being sold at the present time, and as the bull was the father of the herd, steps should be taken to protect the purchaser against buying unsound animals whose defects were not disclosed. In Denmark, Mr. Lye went on to say, the average amount of butter fat per cow had been raised to 240 lbs., while in New Zealand it reached only 160 lbs., though carefully culled herds showed as high an average as 404 lbs. He had recently culled ten cows out of his own herd for various defects, and sold them to a butcher under the impression that they would be converted into beef, for which they were admirably suited; but since then every one of the ten had been sold to different dairy farms.

TARANAKI.

The weather up to about the beginning of December was very unseasonable, high winds persistently prevailing. Since then there have been beneficial rains and less wind, resulting in an abundance of feed. The dairy industry is therefore progressing most satisfactorily. The fall in the price of cheese has caused many factories to resort to butter making, the factories being equipped with dual plants, so that either article can be manufactured as the market price warrants.

HAWKES BAY.

The central portion of the Hawkes Bay province has had a good season so far, not being so dry as further north, and crops are more advanced than in the southern district. The weather has been very warm and dry in Poverty Bay, and the rainfall below the average during the past two months. A rain a fortnight ago brought some relief, but since then there has been some abnormally hot weather. The stock markets are very quiet.

Gisborne Harbour.

The rich and rapidly developing Poverty Bay district, which has three freezing works, is badly off for a harbour, and at present all cargo to and from large vessels has to be lightered. Three of the principal harbour engineers in New Zealand were recently engaged in working out a scheme for a harbour at Gisborne, but it was considered too large and costly. They have now submitted a modified scheme for the same site, which will provide for a harbour 120 acres in area, with a depth at the entrance of 30 ft., and the cost is estimated at one million. As a temporary relief to the present silted inner harbour the engineers recommend, inter alia, a mid wall in the entrance channel, which will reduce the width to 100 ft.

WELLINGTON.

The weather during the latter part of the month showed improvement, but the season is late owing to heavy rains in parts and strong cold winds. Much land has been under flood water in the Manawatu district. Shearing is not yet completed, and in fact it is very late all over the Dominion this season, as very few are anxious to hurry forward their wool in the present state of the market. The delay in the opening of the freezing works has caused a decline in the prices of both fat and store sheep. There is not much demand for cattle, except the best dairy sorts and well-grown steers.

Prices of Land and Wool.

The Prime Minister recently stated that the decline in value would make the wool export this season £6,000,000 less than it was last season. That was a serious matter, he said, but the deficit would be partly made up by an increase of £3,000,000 in the value of dairy product exports. The fall in the price of wool has had a distinct effect upon the selling value of grazing land. At present it is noticeable chiefly in the decline of the number of sales taking place. A little while ago, Sir Walter Buchanan was complaining of the delay in making a revaluation of the Wairarapa district, but it now seems likely that the valuation of this district, which will be put in hand shortly, will be many thousand pounds less than it would have been had it been made a year ago.

Sir Thomas Mackenzie.

Sir Thomas Mackenzie, late High Commissioner in London for New Zealand, has on his return to the Dominion been warmly welcomed by his friends and commercial men, as it has been fully realised that he served his country well during his term of office, and especially during the war. There is a movement on foot, especially in Otago, where Sir Thomas is perhaps better known than in other parts of New Zealand, as most of his time in Parliament was as a representative of an Otago seat, that he should be again sent to London as New Zealand's Trade Commissioner. No intimation on the subject has yet been made by the Government, but Sir Thomas Mackenzie in one of his addresses said there was no place where he could be of more service to the Dominion than in London. He was now free to accept service, but how long he would be free was a question.

The Wheat and Flour Position.

Mr. W. G. McDonald, the Government Wheat Controller, states that the latest figures relating to wheat showed that this year millers had bought 3,825,000 bushels of wheat grown in the Dominion. Australia had supplied 1,858,000 bushels, and there was a carry over from last year of 519,000 bushels. This represented 6,202,000 bushels available for gristing, irrespective of quantities for seed and fowl wheat. The consumption represented an equivalent of 500,000 bushels per month, or a total for the year of 6,000,000 bushels. The distribution of stocks over the Dominion is fairly even, so there should be sufficient flour to last until the end of February. The prospects were for an early harvest. Wheat is expected to begin to come on the market in the third week in January. There is, therefore, no need for the public to anticipate a shortage or any interruption in the supply of flour.

The Season's Lambing.

The complete estimates of the season's lambing furnished by the inspectors of stock are published in the December number of the New Zealand "Journal of Agriculture." The number of ewes that were put to the ram in the North Island was 5,838,704 (previous year 6,311,797), estimated average percentage of lambing, 87.95 (previous year, 81.57). This will give an estimated lamb crop of 5,135,324, against 5,148,779 last season—a very slight difference. The number of ewes put to the ram in the South Island was 5,729,845 (previous year, 5,996,709), estimated average percentage of lambing, 80.20 (previous year, 72.23), giving an estimated crop of 4,595,426, as against 4,331,883 last season, or a little over a quarter of a million increase. The estimated number of lambs for the whole Dominion this season is 9,730,950, as against 9,480,662 the previous year, an increase of 250,288. These estimates are usually very near the mark, and will give a fair idea of what

the lambing result has been. The lambing in the South Island last season was the poorest for a number of years.

Masterton Woollen Mills.

Mr. J. C. Cooper, managing director of the Wellington Farmers' Meat Company, during his visit to England, was able to obtain the necessary machinery for the new woollen mills at Waingawa, which are to be run in conjunction with the Wellington Meat Company's meat freezing works. Some of the machinery is already on the way to New Zealand, and the whole of it was to be shipped by the beginning of the New Year. The company was fortunate in being able to secure a portion of the machinery a short while ago.

Live Stock Markets.

With all the freezing works closed and their opening uncertain, on account of the wages dispute, prices of fat stock have been ruled entirely by local demand. Fat lambs have continued to sell well, as their value in the near future seems assured, but prices for other stock have eased as supplies increased.

CANTERBURY AND MARLBOROUGH.

The northern parts of Canterbury have been fairly dry during the greater part of the month, less than an inch of rain having fallen up to Christmas. In South Canterbury the conditions were much worse, and crops and pastures were suffering severely from persistent drying winds and heat. The day after Christmas, however, a nice rain set in throughout the province, averaging from $\frac{1}{2}$ in. to $\frac{3}{4}$ in., and this eased the position. It will considerably help the grain crops, and give the rape and turnip seed lately sown a chance to germinate. Harvest has commenced among the early crops on the lighter land, but as much seed was sown late, the harvest will not be general for several weeks. The drying up of feed has checked the lambs, but dry sheep out of the wool have improved well. The Marlborough province has had a splendid season, harvest has commenced, and fat stock are plentiful. The rainfall recorded in Christchurch for the year is 26.84 in.—an average fall—as compared with 21.90 in last year.

Importation of Pedigree Stock.

The Canterbury A. and P. Association have received a letter from the New Zealand Council of Agriculture covering the following reply from the Minister for Agriculture to the remit asking that the Government be urged to give more encouragement to the importers of pedigree stock:—

"I am not quite clear as to the direction in which it is desired that more encouragement should be given to the importers of pedigree stock. The Government is fully alive to the necessity for not only maintaining the high standard of quality of our purebred stock, but of endeavouring to improve it, and also of the necessity for the introduction of new blood. It has always been its policy to give such assistance as it could to importers of purebred stock, and this policy will be continued. I would be obliged if you will advise me whether the discussion at the conference indicated any specific directions in which the meeting particularly desired action to be taken by the Government, as I will be only too pleased to consider the matter."

A recommendation was adopted to the effect that the Government be asked to subsidise the charges for transporting pedigree stock to the Dominion, or to pay the whole of the charges.

Shearing Classes.

A student at the shearing classes at the Christchurch Technical College, on applying for work from a sheepowner, was told that a learner was not wanted. The College Board decided to take steps to enlighten sheepowners regarding the quality of the work that was done by students at the shearing classes. From remarks that are made at various times by sheepowners, it seems that many of them cannot realise how much a student can learn at shearing in one season. It had always been considered that it took five or six years to make a shearer. The whole difference between learning at a class in one year and in five or six years in a shearing shed is that in the former case the student is taught, and in the latter the beginner had to learn as best he could by himself. As a fleece-picker he probably got an odd sheep now and then, and consequently it took him some years to really learn the business of shearing.

OTAGO AND SOUTHLAND.

The country from Dunedin southwards has had sufficient rain to ensure plenty of feed, and the crops generally are looking well, though some are late. There is very little demand for either store cattle or sheep, and prices have

steadily weakened. North Otago received a good rain at Christmas, and it was very welcome both for grass and crops.

The Kea.

When the kea, the native mountain parrot, first became known as a sheep killer, its depredations were confined to Otago. These birds, however, steadily migrated northwards until they became as bad in North Canterbury as in the south. They have, however, not left their original haunts, and it is reported that they have been causing destruction in the Lake Wanaka district. Mr. Oswald Edie shot sixteen keas at Highland Creek, on Glencoe Station, one day recently. The beaks of the birds command a bonus of twelve shillings each, so that Mr. Edie experienced a profitable day's shooting. The keas have been unusually active during the past few months, and runholders in the vicinity of Lake Wanaka report serious losses of sheep owing to the depredations of the birds.

Selling Stock by Weight.

The Farmers' Union in Otago have brought up the question of selling cattle by weight. The Dunedin Saleyards Company were approached, and they replied, stating that it was impossible to conform with the desire to have a weighbridge installed at Burnside with the object of selling stock by weight. The matter had been considered very fully by the company, and it would mean a very heavy expenditure on the part of the company, and probably involve a complete rearrangement of all the cattle yards, in addition to the cost of the weighbridge itself. So many different interests would be affected by the carrying out of the suggestion made that it seemed there should be some steps taken at a conference of all the parties interested before a definite decision could be come to. The Otago executive of the union was not satisfied with this reply. It was resolved that the Government be asked to consider the question of granting assistance to the authorities in the four centres, and make it compulsory that the sale of cattle and sheep be by weight.

Argentina.

(FROM OUR OWN CORRESPONDENT.)

BUENOS AIRES, 1st November, 1920.

Copious and general rains have fallen, and the whole position as regards the crops has been altered for the better. The wheat is safe, and the linseed crop greatly benefited, although both it and the oats have suffered greatly from drought. Graziers are particularly jubilant, as it has been a good grass rain, and will bring on the feed before the extreme summer heat is on us. Abundant pasture is now assured. The soil is in excellent condition for planting the maize crop, and a large area is being planted.

Prosperity.

This country has been passing through a period of very great prosperity, resulting from the abundance, good quality, and high value of our principal cereal crops. There has been keen competition amongst the foreign markets, and prices have reached record levels, whilst export of cereals has reached enormous proportions. There has been no scarcity of shipping. Although most pessimistic forecasts were made, "The Pastoral Review" has been almost alone during the later stages of the war and immediately following it in forecasting ample shipping. At the time of writing the wool market is paralysed, and it is calculated that 80,000 tons of the last clip are still on hand, principally coarse wools.

Importation of New Zealand Sheep.

The s.s. "Highland Pride" has just arrived from London with a consignment of New Zealand sheep for Mr. Ernest St. C. Haydon, of Cabana Kia Ora. This shipment consists of thirty-five Lincoln rams, fifteen Corriedale ewes, and six Corriedale rams. The Corriedales are destined for Mr. Haydon's own Cabana, where he already possesses a considerable flock of this grand utility breed of New Zealand sheep. The Lincolns will be offered at auction, when owners of this splendidly-woolled class of sheep will have an opportunity of securing high-class sires. The Lincoln hoggets are in full wool, and left New Zealand on 30th June, and until reach-

ing here on the 14th have never been on land. It is really wonderful how these sheep have stood this journey, and when they are shorn they will rapidly grow and improve very much. Mr. Haydon had a most sensational sale for forty-nine New Zealand Lincolns last February. The expenses of bringing these sheep such a long journey are very heavy, and it is to be hoped that Mr. Haydon's enthusiasm and confidence in New Zealand type of Lincolns will be amply recompensed.

Petroleum.

Our local supplies of petroleum are increasing year by year, and in a country of dear fuel such as this it is indeed a godsend. At the rate the Government wells are being increased, by 1924 we should have an output of 700,000 cubic metres per annum, 40 per cent. of our present total requirements. In addition, concessions are to be made to railway companies to undertake boring operations of their own, so that no doubt the supply will be largely increased. Nearly all the engines on our Anglo-Argentine railways have been converted to the oil-burning system, and in a few years little coal will be required by our railways. By the newly-discovered Scarab system the thickest of residues can be successfully consumed. A great feature of the oil-burning engine is the absence of danger from sparks, with resultant immunity from fires among crops and grass.

Export Tax on Wool.

The Chamber of Deputies have exempted wool, hides, and other produce as specified from export duties. It is provided that—

Art. 1.—Wool in general, washed or unwashed, as also ox hides, horse hides, and sheepskins, are hereby declared to be exempt from export duties for one year from the date of the promulgation of this present law.

Art. 2.—The Bank of the Nation is authorised to discount commercial bills of exchange, renewable within a term of two years, for woolgrowers or merchants holding wool, subject to such guarantees and rates of interest as it may consider suitable.

Art. 3.—The Bank of the Nation is authorised to discount commercial bills of exchange in respect of sales of wool on credit terms for export, within the period of two years, and subject to such guarantees as it sees fit to require.

Art. 4.—The Bank of the Nation is authorised to rediscount bills for other banking institutions in connection with operations realised in terms of this law, within the time limit above stipulated.

Art. 5.—All the authorisations accorded to the Bank of the Nation by this law shall lapse at the end of one year, counting from the date of the promulgation of the law.

Art. 6.—The executive power shall allow the fiscal warehouses available in the capital and at Bahia Blanca to be utilised for the storage of wool, ox-hides and sheepskins subject to the same conditions as apply to warehouses for general merchandise.

Art. 7.—Subject to the same conditions, the importation of thick woollen cloth for the manufacture of clothing is declared to be exempt from all import taxes. In this exemption are included the industrial products directly intended for the manufacture of thick cloth for wearing apparel.

Big Development.

Almost all the promising openings at the present moment here are concerned in some shape or another with construction. One of such schemes has already been submitted to the Buenos Aires municipality by a local firm, which asserts its ability to obtain the £3,000,000 that the laying out and general equipment of three large subterranean markets having ample cold storage would require.

If it is begun there will be a big order for cold storage machinery and the incidental plant that goes with it, together with a large number of waggons, capable of being used on the tramway system for moving perishables from one depot to another, or from thence to the twenty-four retail markets which are part and parcel of the plan as worked out by the promoters.

Shipments of Produce for Nine Months.

The following shipments in round numbers are staggering, and have employed a big fleet of vessels:—Wheat, 5,000,000 tons, maize 2,000,000 tons, linseed 800,000 tons, oats 350,000 tons, flour 170,000 tons, bran 50,000 tons, barley 40,000 tons, rye 10,000 tons, canary seed 6500 tons, hides 2,500,000, butter 300,000 cases, besides huge quantities of skins, wool, sheepskins, horse hair, preserved meat, casein, tallow, guano, bones, horns, dried blood, premier jus and quetsche.

South Africa.

BLOEMFONTEIN, 1st December, 1920.

The Cattle Industry in Rhodesia.

The cattle owners of Rhodesia are becoming perturbed as to the future of their industry, which has expanded at such a rate that unless other outlets than the local and Union markets can be found for it will leave them with nothing but a glutted market for supply. There are the oversea markets, of course, but in order to take advantage of these there must be facilities at the producing end in the way of abattoirs, cold storage, and other accommodation necessary to the preparation of meat for export. These facilities at present do not exist. The Union markets, chiefly Johannesburg, are practically all that are available for the disposal of surplus supplies, and even these markets would have long since been glutted had it not been that the facilities that are lacking in Rhodesia are to be found in the Union, which consequently has done all the exporting that is to be done, and thus relieved the congestion that would have otherwise overtaken the whole South African meat industry.

Slaughter cattle from Rhodesia, whether intended for Union consumption or otherwise as buyers might determine, have to make a tremendous train journey in order to reach their destination; they have to be sold on what is known as the quarantine market, which means that directly after sale they must be taken to the municipal abattoirs and be slaughtered. Hitherto the regulations have prohibited the slaughter of quarantine cattle at any but the Johannesburg abattoirs. This has practically limited all competition to the one centre, but as the result of agitation the restrictions regarding quarantine cattle have been so far relaxed that such cattle may be despatched to other centres providing facilities for immediate killing. But the relief is only partial and temporary.

What with disabilities, irregularities, and so on, the Rhodesian consignor finds that his beasts have been realising an average of £2 10s. per head less than the local product sold on the open market. There is no telling either what may happen at any time to cut off this market altogether—reasons economic, political, or otherwise. Union breeders themselves may sooner or later demand protection from their Rhodesian brethren when it comes to catering for a market too restricted for both. In the meantime two Union companies interested in the meat supply, one a co-operative, the other a semi-co-operative concern, have been wooing the meat producers of Rhodesia with a view to securing their custom; if the Rhodesians will find the money for cold storage buildings these companies will do the rest by placing their organisations at the disposal of their clients for the purposes of developing an export trade. But the Rhodesians are taking no steps without due consideration, and are going into the whole matter with methodical thoroughness and a determination to start on right lines from the foundation. Eventually it will be decided whether the country will establish its own cold storages and canning works, and act on independent lines, or whether to take part in a general co-operative movement with one or other of the concerns in the south. In this connection the difficulty to be overcome lies in the fact that Rhodesia has no port of her own; her choice lies between the use of foreign ports, which are nearest, but which are in Portuguese territory, or the ports in British territory, which, though farther away, are nevertheless more or less within the family circle.

The Agricultural Union and Minister for Agriculture.

The season of farmers' parliaments—in other words, the yearly gatherings of the various agricultural unions of South Africa—wound up recently at Durban, when the South African Agricultural Union, the body which consists of representatives chosen from the four provincial agricultural unions of the country, went through its annual agenda.

It was decidedly a pity, however, that the occasion of the gathering furnished point to the arguments of those who regard these unions as impotent for influence in so far as moving Government to action is concerned. Although this conference represented the combined agricultural interests of the whole Union, the Minister of Agriculture was conspicuously absent. This absence was all the more remarkable inasmuch as it is from the executive of the associated unions that the lately created advisory board to the Minister of Agriculture is drawn. The presence of the Minister at all these congresses is looked upon as a matter of course; when the most important gathering of them all is ignored, or rather excuse found for non-attendance, doubts are created as to whether these unions are regarded by the Government as having any influence or whether the present Minister has any intention at all of taking this advisory board—which was a creation of his predecessor in office—into his confidence, and as integral part of the administrative machinery of his department. A resolution was therefore passed, in which it was recorded that the congress could not too strongly express its surprise and regret that the Minister of Agriculture had not made it possible to be at this congress of the representatives of the agricultural industry of South Africa.

Conference of Wool and Mohair Growers.

A conference of the wool and mohair growers' representatives of all parts of the Union has just concluded here. The conference was called for the purpose of finding some way out of the impasse which has arisen in connection with the markets for these commodities. There is, of course, no need for explaining the nature of a situation which holds good for Australia on a much larger scale than it does in this country, the only difference being that perhaps we have a larger percentage of unsaleable wools, while as for the mohair growers they are confronted with a position that has pressed upon them for three solid years. The Minister of Agriculture (Mr. Malan) said that the Government had not been idle. One idea was to utilise the ten million pounds' worth of enemy property in this country still in the hands of the custodian as security against the supply of wool to that amount. Such a scheme, however, he pointed out, would require not only the consent of the owners of that property, who were now receiving 4 per cent. interest, but would also have to be backed by a guarantee from the German Government that it would be responsible for the payment of the interest to the private owners of these securities until the principal advanced by this Government for paying the wool farmers was repaid.

Another scheme was that South African wool might be bartered for goods made in Germany, and required out here. For instance, the Government could take rails for the railways, pay the Germans in wool and the growers in cash. But such a scheme had to be undertaken with caution, as Switzerland had had some such agreement with Austria, and several train loads of the exchanged articles had gone astray. The Minister did not say which country's goods had gone astray, but the inference was plain. Regarding these proposals agents of the South African Government were already at work in order to ascertain whether Germany could come to one or other of the arrangements suggested.

A whole sheaf of questions was fired at the Minister at the conclusion of his address, the chief point of which was whether the Government was prepared itself to advance money to farmers on account of their wool, especially to those whose needs were pressing, such advances to be in the form of payments through the Land Bank to co-operative societies or groups or by way of certificates covering half the appraised value of a farmer's wool, and which he could present to a bank and have cashed on the Government's indorsement. Mr. Malan's reply was emphatic—election or no election looming just ahead, he was not going to commit himself or the Government to any scheme that entailed wool being held up; all the Government could do was help in the matter of finding a market to get the wool cleared out of the way.

The matter ended up in the appointment of a committee, with which the Minister was asked to co-operate for the purpose of drafting further proposals. These were duly sub-

mitted, but from subsequent proceedings it appeared that the Minister had had very little say in the drafting of them. These were to the effect that the Government should take steps to provide immediate relief for the wool and mohair growers; that Government should issue certificates not exceeding 50 per cent. of the assessed value of wool, such certificates to be legal tender; and that in the meantime the Government should go on with the German scheme; and, lastly, that the Government should place nine millions sterling at the disposal of the Land Bank to make advances to co-operative societies or recognised groups of producers. The proposal regarding certificates was rejected, but the others were carried, in spite of the fact that the Minister declared that the Government had no power to incur expenditure of the kind involved in the first resolution, while the last was a wholly impracticable one from a legal as well as an administrative point of view.

United Kingdom.

LONDON, 2nd December, 1920.

The past month has been a period of fine, open weather, and remarkably high temperature for the time of the year. As the corn harvest had been very protracted by the damp weather, in many parts of the country operations were completed as late as in the past four weeks. On the whole, the crops may be said to have been harvested in moderate condition; in the east and south-east most were fairly well secured, although the later crops of barley were somewhat stained, but in most other districts a fair amount, especially of wheat, was carted in satisfactory condition. In the east and south-east the grain is generally of fairly good quality, but in the west wheat and oats are often a poor sample, there being many badly filled ears and much tail corn. In the north crops ripened evenly, and many were cut rather green, so that the quality of the grain is very variable.

The total quantity of roots grown this year is considerably greater than last year, and with the large stocks of hay, farmers have generally an adequate supply of home-grown winter keep.

Young seeds are strong and healthy, and are practically everywhere a good plant, promising well for next year's hay crop.

The dry weather has suited live stock, and with good supplies of grass in the pastures both cattle and sheep have done well. In practically all parts of the country the quantity of winter keep on the farms is adequate, though roots may sometimes be scarce, and much of the hay is not of good quality. In some districts there are hardly enough cattle and sheep to graze the aftermaths.

Lamb Marking.

Searing Iron or Knife.

Tests carried out at the Texas Agricultural Experiment Station, U.S.A., seem to prove pretty conclusively that the knife is the better instrument for docking lambs. The report says—

The results obtained in docking 200 lambs indicated that no advantage is to be gained in docking young lambs with the hot iron or docking pincers. This operation can be performed more quickly with the knife, and apparently with no greater danger of fatalities due to excessive bleeding.

The lambs docked with the sharp knife healed one week sooner than those docked with the hot iron.

In practically every instance the knife left a healthier, cleaner wound or sore than did the hot iron.

The lambs docked with the knife made a slightly larger gain throughout the test than did those docked with the hot iron.

No advantage was gained by searing the artery after docking with the knife.

Australian Rainfall Map.

N.B.—100 points = 1 inch.



Seasonal.

The whole country is still enjoying an excellent season, and graziers and farmers alike enter the new year in good heart as regards that aspect of the general situation. The pastoral outlook everywhere in New South Wales is magnificent, and feed is in abundance, though conditions are very favourable to blowflies. Some of the wheat crops have been damaged in harvesting by the heavy rains, but, generally speaking, the yield should be good. In Victoria there is also ample pasture and water, and the wheat harvest is expected to give a very high return. The grazing situation in Queensland is quite satisfactory, the far west being in wonderful order. The wet season has not yet made its full weight felt, at least in the interior, but, as stated, there is plenty of good grass to carry stock. The only worry is the blowfly. Pastures are still very good in Tasmania, particularly in the northern

half, and they are holding out well. Stock are in excellent condition, and the wheat harvest promises to be the largest for many years. Practically all over South Australia there is an abundant supply of water, grass, and herbage, while the hay and wheat crops have given magnificent returns. In some districts the dry feed will not have been improved by the latest heavy rains, but altogether there is very little to complain of. Western Australia is also in good order pretty generally, though the southern areas have been on the dry side during the month. This, however, is only seasonable; occasional monsoonal storms have brought useful rains to the Kimberleys. The position in New Zealand is fair to good throughout, though on the dry side in Poverty Bay and South Canterbury, where a good rain would be welcome. The Manawatu district has had too much moisture, and both there and in the Wellington province the season is late, owing to the strong cold winds and heavy rains.

Rainfall Returns.

EXPLANATION.

In the first column will be found the average yearly (district) rainfall, in the second the total fall to date, in the third the mean fall for the month, the fourth is the average rainfall for the next month based on the return of rainfall ever since records were taken, and in the fifth the condition of the pastures—E, excellent; G, good; F, fair; I, indifferent; B, bad.

WESTERN AUSTRALIA.

No.	Division.	Average Yearly Rainfall.	Total from 1st Jan. to 31st Dec.	Total Fall for Dec.	Average Rain-fall, Jan.	Pastures.
		Inches.	Points.	Points.	Points.	
1	North Kimberley	27.32	1,798	442	808	G
2	East Kimberley	25.96	1,818	253	644	G
3	West Kimberley	23.26	2,380	710	624	G
4	De Grey	13.74	956	150	254	G
5	Fortesque	9.47	841	2	133	G
6	West Gascoyne	9.13	855	7	72	G
7	East Gascoyne	9.40	744	8	127	G
8	S.W. North Coastal	18.02	1,920	0	48	G
9	S.W. South Coastal	35.85	3,960	30	49	G
10	S.W. Central	17.15	1,720	5	54	G
11	Eucla	14.29	1,714	38	56	G
12	South-eastern	10.08	836	3	78	G
13	North-eastern	10.29	797	0	167	G

SOUTH AUSTRALIA AND NORTHERN TERRITORY.

No.	Division.	Average Yearly Rainfall.	Total from 1st Jan. to 31st Dec.	Total Fall for Dec.	Average Rain-fall, Jan.	Pastures.
		Inches.	Points.	Points.	Points.	
14	Northern Rivers	44.70	3,908	725	1,107	G
15	Northern Plateau	12.18	2,012	671	250	G
16	North-west	8.21	1,215	52	43	G
17	Far North	7.02	1,298	144	59	G
18	West of Spencer's Gulf	13.02	1,671	88	37	G
19	Upper North	13.03	2,147	117	71	G
20	North-east	8.30	1,405	123	67	G
21	Lower North	17.39	2,209	154	65	G
22	West-central	17.15	1,920	107	48	E
23	East-central	23.61	2,690	176	78	E
24	Murray Valley	13.01	1,537	145	50	G
25	Upper South-east	16.57	1,641	98	48	G
26	Lower South-east	25.49	2,675	55	88	G

QUEENSLAND.

No.	Division.	Average Yearly Rainfall.	Total from 1st Jan. to 31st Dec.	Total Fall for Dec.	Average Rain-fall, Jan.	Pastures.
		Inches.	Points.	Points.	Points.	
27	Peninsula North	57.76	5,902	1,973	1,480	G
28	Peninsula South	39.67	3,138	410	1,025	G
29	Lower Carpentaria	28.20	3,253	339	817	G
30	Upper Carpentaria	26.02	3,358	432	683	G
31	Barron	63.85	6,786	770	1,351	G
32	Herbert	76.84	8,023	385	1,539	G
33	East-central Coast	46.96	3,983	267	996	G
34	West-central Coast	24.17	2,569	345	607	G
35	Central Highlands	25.16	2,559	163	436	G
36	Central Lowlands	19.59	2,401	163	372	G
37	Upper Western	15.20	2,310	290	359	G
38	Lower Western	11.98	2,373	95	201	G
39	Port Curtis	37.18	3,259	407	717	G
40	Moreton	49.49	5,026	348	668	G
41	East Darling Downs	28.30	2,959	326	376	E
42	West Darling Downs	23.84	2,392	296	350	E
43	Maranoa	23.67	2,514	266	330	E
44	Warrego	17.76	2,351	239	215	E
45	South Far-west	13.08	2,450	358	180	E

NEW SOUTH WALES.

No.	Division.	Average Yearly Rainfall.	Total from 1st Jan. to 31st Dec.	Total Fall for Dec.	Average Rain-fall, Jan.	Pastures.
		Inches.	Points.	Points.	Points.	
46	Trans-Darling North	9.35	1,269	147	103	G
47	Trans-Darling South	10.21	1,258	122	75	G
48	Cis-Darling North	14.09	1,779	214	167	G
49	Cis-Darling South	12.83	1,561	193	96	G
50	Upper Bogan	17.65	2,030	279	188	G
51	Lower Macquarie	18.20	2,190	631	190	G
52	Western Gwydir	20.94	2,187	226	256	G
53	Eastern Gwydir	24.17	2,740	273	288	G
54	Nandewar	29.17	3,057	395	362	G
55	Liverpool Plains	27.31	3,164	390	300	G
56	West New England	31.49	3,376	353	400	G
57	East New England	37.27	3,348	190	520	G
58	Clarence	54.58	5,754	268	619	G
59	Orara	48.42	6,290	252	449	G
60	Manning	50.50	3,823	466	473	G
61	Hunter	34.47	3,451	956	313	G
62	Cudgegong	26.64	3,416	707	243	G
63	Central Plateau	35.19	3,770	934	347	G
64	Warrumbungles Highlands	28.16	3,694	492	289	G
65	Lowlands	22.05	2,573	621	216	G
66	Sydney	48.19	4,342	1,582	360	G
67	Nepean	32.04	3,463	1,267	302	G
68	Illawarra	39.94	3,871	1,250	386	G
69	South Coast	36.26	3,872	1,344	374	G
70	Upper Murrumbidgee	25.57	2,950	647	255	G
71	Snowy Mountains	40.98	4,504	688	344	G
72	Jugiong	30.87	3,231	382	200	G
73	Tumut	21.81	2,594	475	187	G
74	East Riverina	18.03	1,956	224	122	G
75	West Riverina	14.05	1,698	163	108	G

VICTORIA.

No.	Division.	Average Yearly Rainfall.	Total from 1st Jan. to 31st Dec.	Total Fall for Dec.	Average Rain-fall, Jan.	Pastures.
		Inches.	Points.	Points.	Points.	
76	Mallee North	12.32	1,465	107	65	G
77	Mallee South	13.67	1,482	76	59	G
78	North Wimmera	16.40	1,690	70	56	G
79	South Wimmera	20.07	2,055	67	74	G
80	Lower North Country	16.85	1,854	39	95	G
81	Upper North Country	20.04	2,180	56	116	G
82	Lower North-east	28.59	3,089	202	157	G
83	Upper North-east	43.13	4,452	157	230	G
84	East Gippsland	29.93	3,232	282	269	G
85	West Gippsland	34.52	3,431	216	226	G
86	East-central	33.84	3,793	141	217	G
87	West-central	23.60	2,371	112	130	G
88	North central	26.17	2,849	92	128	G
89	Volcanic Plains	24.00	2,247	105	121	G
90	Western Coast	29.63	2,776	124	132	G

TASMANIA.

No.	Division.	Average Yearly Rainfall.	Total from 1st Jan. to 31st Dec.	Total Fall for Dec.	Average Rain-fall, Jan.	Pastures.
		Inches.	Points.	Points.	Points.	
91	Northern	41.86	3,909	181	182	G
92	East Coast	31.93	3,080	242	212	G
93	Midland	21.08	2,032	203	173	G
94	South-eastern	27.79	2,146	174	209	G
95	Derwent	26.81	2,091	170	189	G
96	Central Plateau	31.22	2,596	239	185	G
97	West Coast	87.85	8,376	473	490	G
98	King Island	35.81	3,174	96	125	E
99	Flinders Island	28.41	2,814	146	169	E

N.B.—100 points = 1 inch.

H. A. HUNT, Commonwealth Meteorologist.

Foot and Mouth Disease.

Hypo-sulphite of Soda as a Preventive.

A correspondent writes:—"The discovery by a Belgian bacteriologist of a cure for foot and mouth disease, which 'is not effected by means of a serum, but by the administering of a drug', is reported. The fact that such a cure—and, what is better, a remarkable preventative—was known and used in England as long ago as the year 1874 or thereabout, may be of interest. At that time there were virulent outbreaks of that disease in the Old Country, which occasioned serious losses amongst stock. Acting on the advice of a medical friend, and before the epidemic reached my district, I administered hypo-sulphite (not hypo-sulphate) of soda to every individual head of cattle on my farm.

"Shortly afterwards, the disease broke out all around me with the greatest virulence, every farm in the district excepting my own being stricken with it. Notwithstanding that my cattle actually licked the muzzles of affected animals over my boundary fences, and that the saliva from large numbers of cattle conveyed by a main trunk railway which intersected my pastures was continually carried by the wind on to the grass which my stock were eating, the whole of the latter remained absolutely immune from disease throughout the entire epidemic. The quantities in which the hypo-sulphite was given were, so far as I recollect, 3 ozs. to each full-grown animal, and proportionately smaller doses to younger ones, according to age and size, three times a week, mixed in a mash, or, if not so eaten, dissolved in water and administered as a drench.

"According to the expressed opinion of a public health officer, the hypo-sulphite acts as an internal disinfectant, and so, if used as a preventive measure, affords immunity from contraction of this disease."

Mr. M. E. Maher, who has been managing Collaroy Station, near Cassilis, N.S.W., for some years, and who is leaving the district, celebrated his golden wedding recently, and was presented by the old hands and the employees of the station with a silver tea service and a silver and oak tray. Both Mr. and Mrs. Maher are held in high esteem, and they will be greatly missed in the district by their many friends.

Utilising the Locust in South America.

The Ministry of Industry of Uruguay some time ago nominated a commission to carry on experiments with drying locusts. The report of the commission has now been issued, and serves to show that even the most unmitigated pest can be turned to some account. For the purpose of the experiments drying rooms were used. The locusts, put into a hopper, were carried by an endless band into suitable ovens, whence they came out almost dry. The process was completed by exposing them to the sun. An analysis of product was then made, and it was found to contain over 40 per cent. of digestible protein, and 10 per cent. of fatty matter.

The analysis proved that dried locusts can be used as stock food. The integral nutritive value is superior to that of oil cake, and, further, it has been found that pigs, horses and sheep eat them readily. Before using as a manure it would be necessary to extract the fatty matter. If that were done the residue would be richer in nitrogen and phosphoric acid than dried blood or powdered meat meal, and the fatty matter could be utilised as a lubricant.

Unfortunately, the extracts of the report that have reached this country do not give any particulars as to how the locusts are collected, or the cost of treatment.

Plant Food and Meat.

Mr. Elgar, chairman of directors of the Wellington Meat Export Company, New Zealand, recently said that as long as he could remember the doctrine had been preached that it was wasteful—even wicked—to kill stock when they were young. Experiments had, however, exploded this fallacy. The cow that produces human food in the form of milk, veal, and beef, consumed 12 lbs. of grass, roots, and hay for every pound of human food produced. The pig that produced pork, bacon, ham, &c., consumed 12 lbs. of meal, chiefly grain. The fowl that produced eggs and flesh, consumed 14 lbs. of grain to every pound of human food. The sheep, for wool and mutton, consumed 24 lbs. of grass, roots, and hay. The steer that produced beef consumed 64 lbs. of grass, roots, hay and straw for every pound of human food produced. The two extremes thus showed what could be saved if, so far as cattle were concerned, cows only were kept—12 lbs. of food for the pound of human food in the case of the cow, against 64 lbs. for the bullock. It was absolutely necessary that the breeding parts of our herds and flocks should be largely increased. Mr. Elgar quoted from an experiment conducted recently in connection with a bullock, of which the live weight was 1156 lbs., and the carcase weight 624 lbs. In the second month of the fattening process the bullock consumed 196 lbs. of dry fodder per week, and produced 4 lbs. of human food. When it weighed 1276 lbs. live weight, and 720 lbs. carcase weight, it consumed 224 lbs. of dry fodder for 2 lbs. of dry human food per week, as against 4 lbs. in its second month. It would thus be seen that it required more food to produce half the quantity of meat in the sixth month of fattening. It was very evident, therefore, that prime meat exposed for sale in our retail shops was a luxury, produced at great cost. It was wasteful in production and wasteful in cooking.

"Wheat Production in New Zealand," by D. B. Copland, M.A. (N.Z.), published by Whitcombe & Tombs Limited, Christchurch, N.Z., price 9s. This is a very interesting study in the economics of New Zealand agriculture, especially in relation to an industry which for the last few years has been thrust unpleasantly into public notice owing to the shortage of home-grown supplies of wheat. The value of the work is considerably enhanced by numerous graphs and tables of statistics, and the whole range of the industry, covering consumption, production, general conditions in New Zealand, the quality of wheat, improvement by selection (contributed by F. W. Hilgendorf, biologist to the Canterbury Agricultural College), history of wheat production in New Zealand, price of wheat, cost of production, &c., is carefully and thoughtfully dealt with.

On the Wallaby.

Rockland, Queensland.

There was an exchange of properties in Queensland, briefly recorded in this Review a month or two ago, that deserves more than passing notice. It was Rockland, comprising about 6500 acres of very sound sheep country, situated about 18 miles to the S.W. of Warwick, up in the hills about 500 ft. above that township and 2500 ft. above the sea level.

The Warwick district has always attracted attention by the richness of its soil, the picturesqueness of the surrounding country, and the many large and fine estates. Rockland was purchased by Mr. E. S. Wilkinson and Mr. G. C. Bernays. The point of interest about this property is that it is a resumption of Rosenthal, one of the oldest, and in the early days one of the largest, properties in Southern Queensland. It extended from the main range to Talgai. It was originally taken up by the North British Australasian Company. Prior to 1875 L. E. Lester was general manager for the North British Australasian Company, with the head station at Rosenthal, a few miles from Warwick. Comprised in its area were South Toolburra and Old Sandy Creek Station. These then were out stations. At this time Rosenthal had a carrying capacity of 100,000 sheep, besides horses and cattle. In 1875 Augustus Fitzherbert Evans, then manager of St. Ruth Station, near Dalby, another of the North British Australasian Company's properties, was transferred to Rosenthal as general manager in Mr. Lester's place. (The general manager of the North British Australasian Company now is Mr. Ernest King.)

Two years after his going to Rosenthal, South Toolburra was made head station, and Mr. A. F. Evans resided there until 1891. When he resigned from the company he went to live at Rockland. Part of this property he himself selected, and he acquired the balance from George Lebbatt, W. Greenish, Mrs. A. L. Evans, and W. Reynolds. About the year 1886 Mr. A. F. Evans, jun., eldest son of Mr. A. F. Evans, took charge, and managed the station for some years. After Mr. A. F. Evans, sen., left Rockland, he took up his abode in Warwick. His death took place about twelve years ago, and Rockland was managed for the estate by George Evans, the youngest son and one of the trustees, the other trustees being Mr. L. E. D. Evans and Mr. A. F. Evans. Mr. George Evans died about four years ago, when Mr. L. E. D. Evans, the second son, took charge until, as stated above, the sale took place, Rockland having been for forty years in one family.

We reproduce on p. 17 one or two photos taken on the property. The homestead is a comfortable building of about ten rooms. It is beautifully situated on a hill commanding an extensive view of the surrounding country. On a hill opposite, and about three-quarters of a mile distant, are the Rocks called The Three Brothers, and known far and wide. They are three huge granite boulders standing on a foundation rock, and about 65 ft. high. They form a prominent feature in the landscape.

The Rockland country is very good sheep country. The property is well improved. It will carry a sheep to the acre. It is watered by creeks and wells. It is not often such a large area of country in close touch with the finest market in South Queensland comes on the market, and the present purchasers were fortunate in acquiring it. Both of them are returned men. Mr. Wilkinson, who was in the Remount Service in Palestine, was mentioned in the despatches of General Allenby. Mr. Bernays was in the 5th Machine Gun Battalion in France. He was badly wounded, and unfortunate enough to spend two and a-half years as a prisoner of war in Germany.



DEVON CATTLE AT MURRULLA, WINGEN, THE PROPERTY OF MESSRS. ABBOTT & ABBOTT.



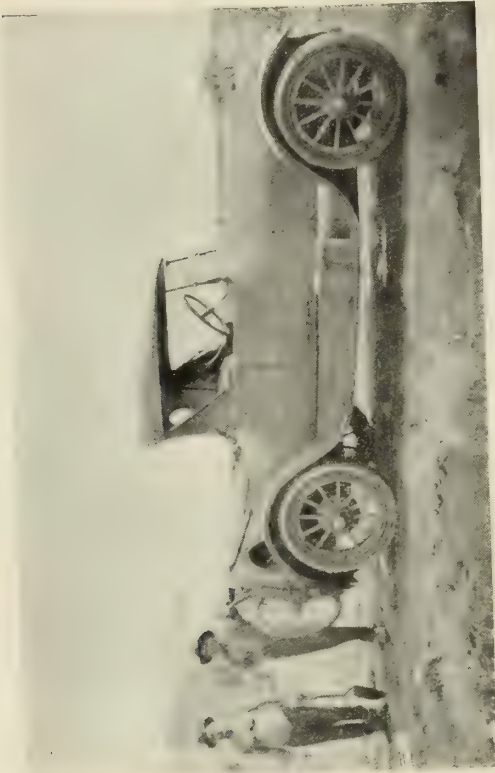
CREEK, NEAR ROCKLAND HOMESTEAD, NEAR WARWICK, Q.
(See "On the Wallaby.")



THE "BURNING MOUNTAIN" AT WINGEN, UPPER HUNTER, N.S.W.



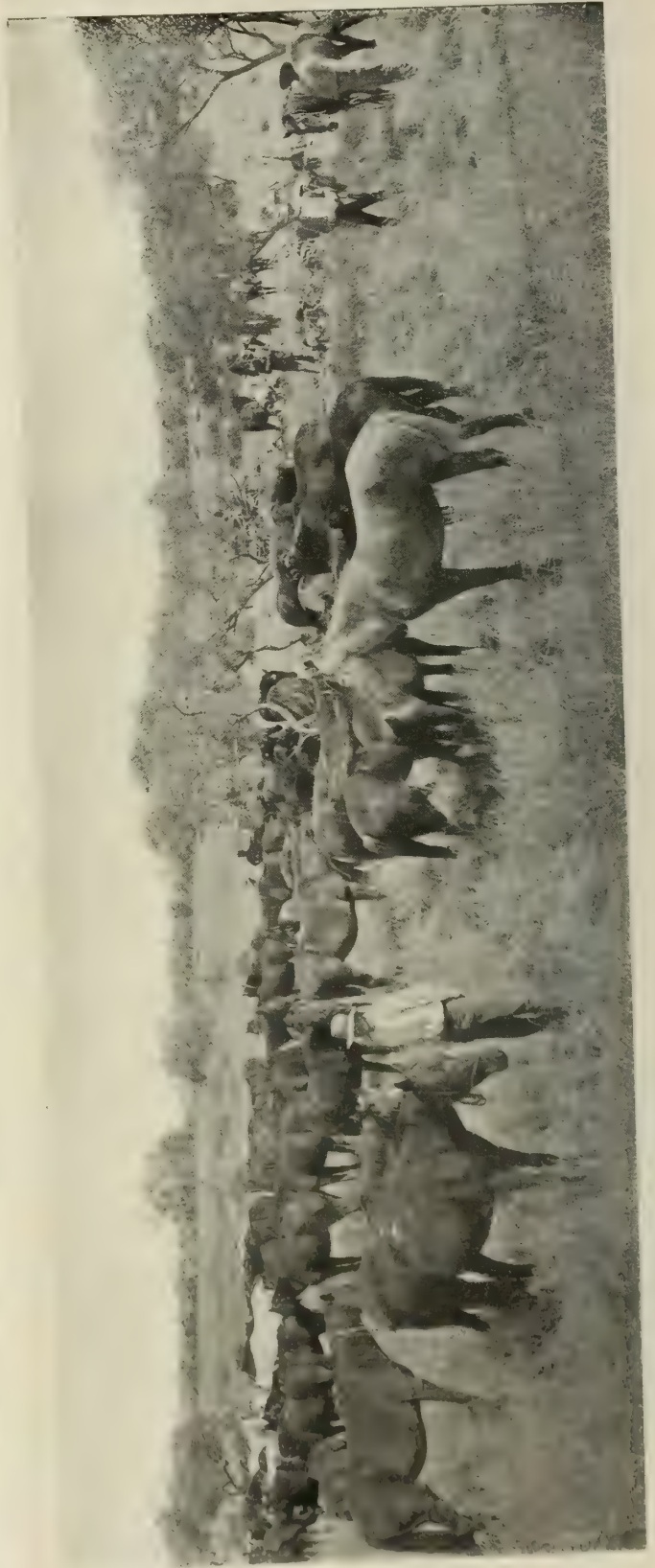
THE THREE BROTHERS.
Granite rocks about a thousand yards in front of Rockland homestead, near
Warwick, Q.
(See "On the Wallaby.")



BUICK CAR DRIVEN BY MR. K. MACKAY, OF CROYDON STATION, ROEBURNE, FROM THAT TOWN TO PERTH (1500 MILES) IN 43 DAYS.



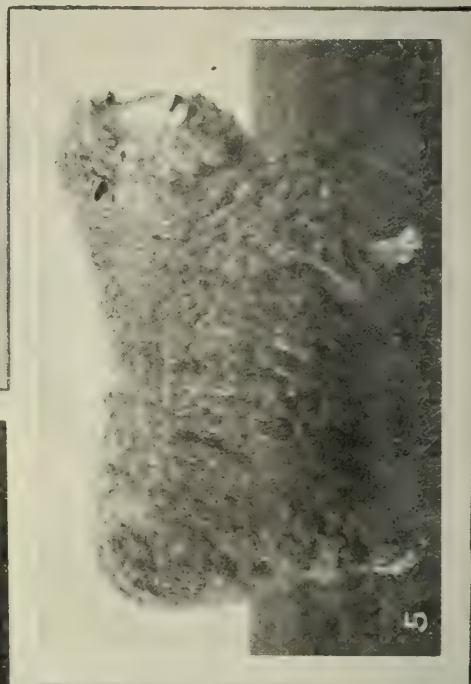
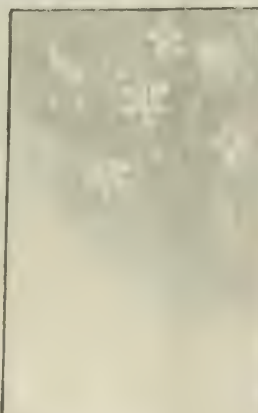
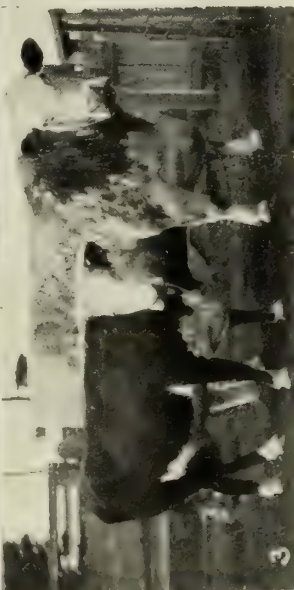
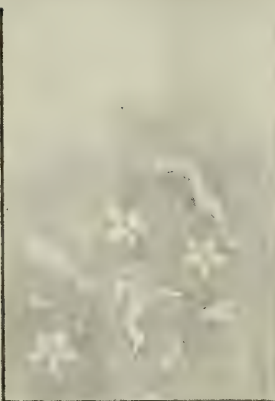
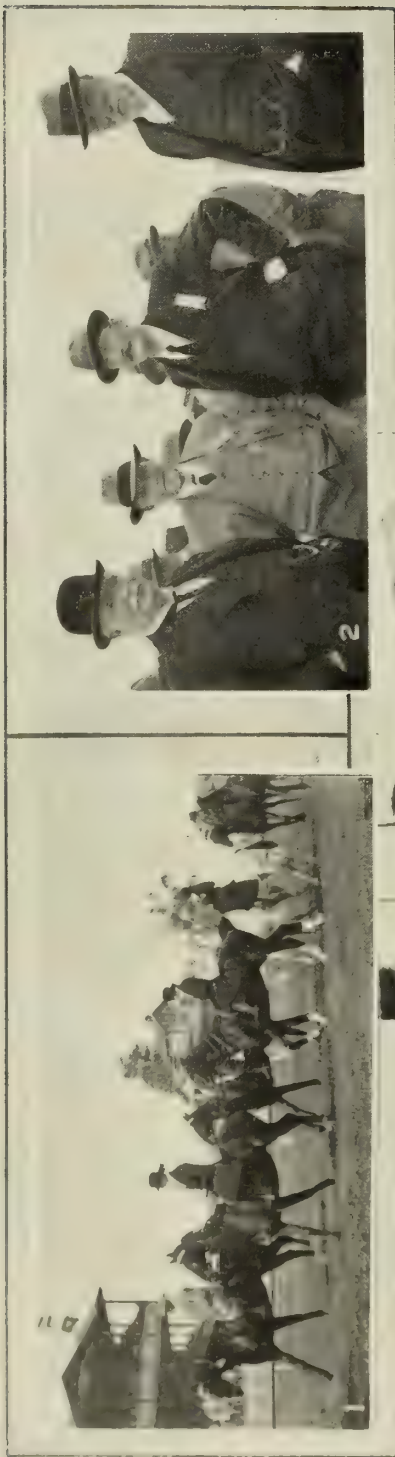
ROEBURNE, ON THE NORTH WEST COAST OF AUSTRALIA



A DROVER'S OUTFIT IN THE GULF COUNTRY, NORTH QUEENSLAND.



DRAUGHT MARES AT FARM WORK IN U.S.A.



1. HACKS ON PARADE.

2. From left to right—Rt. Hon. W. F. Massey (Prime Minister), Messrs. H. V. Hammond (President), F. G. Seddon (Secretary), and H. M. Campbell (Managing Director, Wanganui Freezing Works).

3. Mr. Frank Moore's (Rushy Park) 3rd Prize Fat Bullock, weight 3649 lbs., alongside 1st Prize 3-year-old Hereford.

4. Champion Lincoln Ram. Exhibited by Mr. W. Rayner.

5. Champion Romney Marsh Ram. Exhibited by Mr. W. Rayner.



CHAMPION SHORTHORN BULL, TE MARAMA CANTEBURY PRINCE.
Exhibited by Messrs. W. F. Jacob & Son.



CHAMPION HEREFORD COW, PARK REGAL.
Exhibited by Mr. G. F. Moore.



DISTINGUISHED VISITORS.
The Governor-General, Lord Jellicoe, and party.



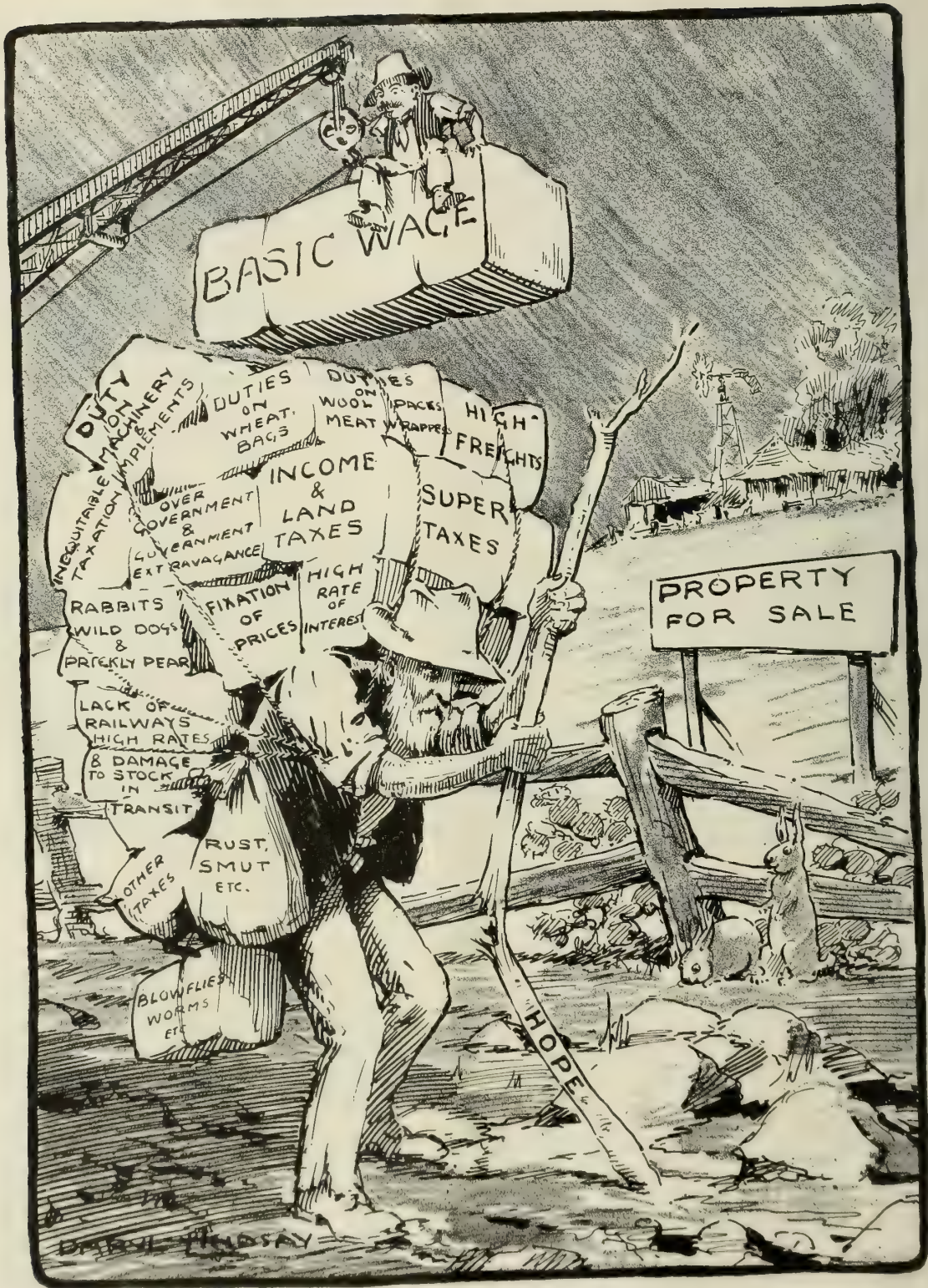
KEEN HEREFORD CRITICS.



CHAMPION LINCOLN RAM.
Exhibited by Messrs. W. Perry & Son.



CHAMPION CORRIEDALE RAM.
Exhibited by Mr. T. O. Haycock.



"THE LAST STRAW."



IN THE HIGHLANDS OF SCOTLAND.



SIR ROSS SMITH ENTERING SYDNEY IN THE FINAL STAGE OF HIS GREAT FLIGHT FROM GREAT BRITAIN TO AUSTRALIA.
ALTITUDE, ABOUT 6000 FEET.



CIRCULAR QUAY AND MILSON'S POINT, SYDNEY HARBOUR, FROM THE AIR.
FINE EXAMPLES OF AERIAL PHOTOGRAPHY.

Obituary.

Neal Durack.

As announced in our last issue, Mr. Neal Durack, a younger member of the well-known Western Australian family of that name, was drowned at the end of November in the Ord River, North-west Australia. He was only 30 years old, and as fine a specimen of young manhood as one could wish to see. It appears that with two friends he was on his way into Wyndham to see his wife off to Fremantle by the "Kwinana." On reaching the Ivanhoe Crossing, they found the river heavily flooded, but Mr. Durack essayed to swim the flood. When part of the way across he suddenly sank, and was seen no more.

He was a son of the late Mr. J. J. Durack—who was speared by blacks many years ago in the north-west—and held a lieutenantancy in the 10th Light Horse, in which he served during the war. He was a fine horseman, bushman, athlete, and swimmer, and did excellent scout and intelligence work in Egypt and Palestine, where he was wounded. At the time of his death Neal Durack was managing Augvigne Station for Connor, Doherty and Durack Ltd.



THE LATE LIEUT. NEAL DURACK.

A fearless and heroic soldier, his manly character and lovable disposition endeared him to all who knew him. As the Minister for the North-west (Mr. H. P. Colebatch) said regarding him: "It is tragic to think that one so singularly well equipped for carrying on the development work of the East Kimberleys, in which his family has played the leading part for nearly 40 years, and in which his father gave his life, should be cut off in this manner. When a young man who has passed through the perils of the Palestine campaign is thus overtaken in the course of his day's work we realise the difficulties and dangers still associated with station life in the far north."

The late Mr. Durack married Miss Sellenger, daughter of Inspector Sellenger, of the Western Australian Police Force, in 1918, and leaves an infant son.

Peter S. Mitchell.

The death of Mr. P. S. Mitchell occurred in Sydney on the 4th of January, aged 67. He had just returned from America, where he had been for a trip for the benefit of his health. Mr. Mitchell owned Bringenbrong Station, on the

Upper Murray, where he resided for many years, carrying on business with his brother, the late Mr. Walter Mitchell, of Towong. Besides his pastoral pursuits, Mr. Mitchell was a great sportsman, and owned many thoroughbred horses, the most famous being Trafalgar, winner of the Sydney Cup and many other classic events. His father, the late Mr. Thomas Mitchell, was one of the first settlers on the Upper Murray.

Thomas Chute Ellis.

The death is announced of Mr. Thomas Chute Ellis, owner of Benara Estate, near Mount Gambier, South Australia. The deceased was born in Adelaide in December 1848, and has been closely associated with the pastoral industry in South Australia and New Zealand, the Benara Estate having been his headquarters. At Benara he bred a high-class flock of Corriedale sheep, while the Benara fat cattle were a feature in the Adelaide and Melbourne markets. Apart from his interest in agricultural societies and racing, Mr. Ellis did not take a prominent part in public affairs. One of his sons, Dr. J. C. Ellis, was killed in the war. He has left a widow, one daughter and several sons.

The Jackal Plague in South Africa.

Corresponding to the dingo pest of Australia is the jackal plague of South Africa, and to all appearances one is as ineradicable a problem as the other. The toll levied by the jackal on the sheep industry in various parts of South Africa must aggregate an enormous sum annually, and the efforts that are made to keep the pest in check must equal in value the direct losses that are being sustained.

As the result of special legislation passed two or three years ago an attempt has been made to deal systematically with the pest by means of "Jackal Clubs," which have been established far and wide throughout the more infested parts. Some of these have achieved a fair measure of success, but these efforts are rendered futile for the most part on account of the indifference or laziness of some, and largely because the breeders of large stock, who do not suffer from the depredations of the jackal, and whose farms form a sort of refuge for it, do not feel inclined to participate in a campaign in which they have no direct interest. The conclusion that is being come to is that the only effective method of dealing with the pest lies in "jackal-proof" fencing. But this can only be effective if made universal, and therefore compulsory, and at present prices of fencing material is out of the question.

As another resource, appeal has been made to the S.A. Biological Society in the hope that that learned body might be able to formulate "an attack along biological lines."

By "lines of biological attack" is no doubt meant the spreading of infection among the members of the jackal tribe, but inasmuch as these animals are very solitary in their habits, as far as their domestic habits are concerned, living in pairs in widely scattered holes and crannies, the method of attack does not appear to offer a very hopeful prospect of success.

A London Office Episode.

An old Queensland pastoralist the other day strolled into our London office, and asked why his subscription to "The Pastoral Review" had been discontinued.

"Why, because you asked us to stop it," was the reply, on reference being made.

"Oh, of course I did," was the rejoinder. "I stopped it in a fit of parsimony, but I find I have cut off my biggest connection with most of what means life to me. The other day down at Newmarket I lost twenty-five pounds at a single race meeting, and I then thought if I can lose twenty-five quid on gee-gees I can afford twenty-five shillings for a year's reading of the good old 'Pastoral Review,' so please put my name on your books again."

Notes of Interest.

THE MECCA OF THE UNDESIRABLES.

North Queensland is the Mecca of most of the undesirable elements of other parts of Australia. Darwin had a large proportion of them, but when matters became flat there, and the meat works closed and there was little scope for these individuals, who will neither work themselves nor allow others to do so, many of them spread themselves over North Queensland—some in the sugar industry, some in the meat industry, and others in the mining industry. Their trail can be traced everywhere. Then again, a large number of the recalcitrant miners of Broken Hill, following the strike there, made their way to North Queensland and engaged in copper mining. It is to the incursion of these individuals that much of the undesirable name associated with North Queensland is due.

QUEENSLAND STATE STATIONS.

The Minister in Charge of Queensland State Enterprises stated in the Legislative Assembly last month that the only State station which paid local authority rates in 1919 was Lyndhurst. The amount of £47 5s. 5d. charged against State stations in the balance-sheet of the Commission for State Enterprises was distributed as follows:—Lyndhurst, £36 1s. 2d; and Buckingham, £11 4s. 3d., the latter being an adjustment in connection with the purchase of that station. Yet there are people in Australia who still pin their faith to Government ownership. It is most unfair to the districts concerned that these State stations should be exempt from local taxation. It means that private owners must suffer, owing to the local authority's diminished revenue for improvement and maintenance purposes.

DRIVING MEN OUT OF THE COUNTRY.

The Prime Minister has received cables from Senator Millen and Mr. Mark Sheldon, Commissioner for Australia in the United States, that numbers of A.I.F. men, discharged in Australia, are returning to England, and others are looking for work in U.S.A. This course is deprecated by the Government, who state that they will not give any assistance to those who may apply for free passages back to Australia, but it is not surprising that a good deal of such emigration is coming on. The policy of unionism in Australia is rapidly making work more and more unprocurable here, and some of the unions have shown in no uncertain manner their antagonism towards the man who did his share for his country. Is it any wonder that men feel little incentive to stay where unemployment and starvation seem to be about the only things offering?

QUEENSLAND REPUDIATION ACT.

QUESTION OF CONTRACT.

The Queensland Government are continually stating that there is no repudiation about their Land Act Amendment Act because there was never any contract. We would like to know if the following are not contracts, what are? The 1905 Land Act gave both grazing farmers and pastoral tenants an extension of lease, undertaking not to increase their rent more than 50 per cent. at any one period. In the Consolidating Act of 1910, clause 109, sub-clause 3 says:—"Provided that with respect to every grazing selection which was applied for prior to the twenty-sixth day of December, one thousand nine hundred and two, the annual rent for each period after the first shall not exceed the annual rent payable for the next preceding period by more than one-half of the annual rent payable for such preceding period." It is the same with pastoral holdings. Clause 43 of the 1910 Act says:—"Provided that with respect to all pastoral holdings mentioned in the second schedule, except when otherwise expressly stated in the said schedule, the annual rent for each period after the first shall not exceed the annual rent payable for the next preceding period by more than one-half of the annual rent payable for such preceding period." Schedule 2 is a part of the Act, and specifies the conditions pertaining to each holding.

JAPAN'S CLEAN RECORD.

From the outbreak of the war until the present day our ally, Japan, has steered a straight course, and deserves, instead of continual jibes and pin pricks, our highest regard and the most courteous treatment. The trouble in the United States and Canada, no doubt fostered by trade unions, must have caused the Japanese Government great annoyance, and the patience they have shown in the face of numerous insults is marvellous. In every detail Japan has kept faith, she assisted in the protection of Australia during the war, she largely helped to convoy our troops, she sent her vessels by scores into the Mediterranean to fight the submarines and to clear up the mines, and has assured the British Empire over and over again in every way of her friendship. The Japanese are a proud nation, and naturally so after their wonderful achievements during the past quarter of a century, and it says much for their good sense that they have put up so long with the treatment some countries mete out to them. Should Australia obtain a mandate over what were the German islands in the Pacific—and it still is to be hoped, in the interests of peace, that she won't—the same treatment should be shown to the Japanese and other races as was shown them by the Germans.

INTERSTATE SHIPPING TRADE.

It is predicted that owing to the intolerable position into which the shipping companies are being forced again and again by industrial troubles, there is likely to be a decided change in their policy in regard to running, or endeavouring to run, passenger steamers in the interstate trade. Already several important coastal passenger ships have been taken off the interstate run, while closely following upon the hint of a change in policy by the owners comes an intimation that offers have been received from British shipping interests for two other well-known passenger liners on the coast. As the owners are utterly weary of attempting to run their vessels without loss in the face of continual hostile action by the maritime and allied unions, it is not unlikely that these offers will be accepted. This is another instance of how "labour" cuts its own throat by its efforts to squeeze more out of employers than the latter can afford to pay. Production, no matter what the article produced may be, will only be carried out as long as it pays to produce that article. In this case the commodity produced, though it be an abstract one, is a passenger service, and "labour" is making it impossible for its production to be carried out, except at a loss. Consequently, it stops, and with it another avenue of employment is closed.

ROCKHAMPTON'S "IRISH" PROGRESS.

"The Morning Bulletin," Rockhampton, publishes the trade returns of that port for the past 25 years, and the figures illustrate to a nicety what happens to a country where private enterprise is handicapped, and where socialistic theories are the order of the day.

What a different report would have been made had several private competing railways had their termini at Rockhampton, and had encouragement been given to private enterprise. Had Rockhampton belonged to the United States, Canada, Japan or Argentina, by now it would have been one of the leading ports, if not in the southern hemisphere, anyway in Australia. The return shows the following articles of export:—

	1896.	1914.	1920.
		Year before War.	
Clean wool, lbs.	8,464,858	2,784,320	764,400
Greasy wool, lbs.	26,366,380	40,639,312	9,097,088
Tallow, tons	5,953	1,420	2,756
Preserved meats, lbs.	9,861,528	6,466,992	2,644,096
Extract, lbs.	139,231	—	—
Frozen beef, lbs.	6,940,386	21,359,968	12,472,096
Frozen mutton, lbs.	2,993,285	1,096,480	—
Frozen sundries, lbs.	—	1,402,567	61,936
Sheepskins, bales	12,767	2,904	968
Marsupial skins, bales	483	590	350
Hides, number	72,714	98,021	47,031
Gold, ozs.	151,140	108,079	96,291
Copper ingots, tons	—	9,334	6,586

As regards values, even with the increased prices, the totals are as follows:—1896, £2,405,792; 1914, £3,764,432; 1920, £1,476,148. If Central Queensland is satisfied after reading these figures that "democracy" as it is understood in Queensland has been a success it must be easily pleased.

News Gleanings.

Sales by auction of the animals at the last exhibition at Palermo, Buenos Aires, represented a total of over £600,000.

Eighteen Lincoln Red store bullocks were recently sold at Spalding market, England, at £68 per head, the highest price for stores ever recorded.

Index for Vol. XXX., January to December 1920, of "The Pastoral Review" can be obtained from our Sydney, Melbourne, or London offices.

Germany has agreed to strictly observe the clause in the Peace Treaty which provides that the Kiel Canal shall be free to international traffic.

The total output of the shipbuilding yards of the United Kingdom during 1920 was 1169 vessels, aggregating 2,141,000 tons, an increase of 214,000 tons compared with 1919.

Apart from huge stud and tobacco farms, the British South African Company controls two ranches with a total area of 3,600,000 acres, and carrying on 31st March last 88,487 head of cattle.

Prickly Pear is made fit for stock food in Texas by singeing the spines with a spirit torch something similar to that used by painters to burn paint off wood. The pear is singed in the paddocks as it stands, when, according to the "Scientific American," cattle will eat it readily.

Early in November it was announced that the Reparations Commission had demanded from the German Government the immediate delivery of 10,000 bulls and 500,000 cows to France, 11,150 cattle to Italy, 210,000 cows to Belgium, and 5000 bulls, 52 draught oxen, and 100,000 cows to Serbia.

The Consul-General for the Argentine Republic notifies that an International Dairy Exhibition will be held in Buenos Aires in May 1921. In addition to entries of live stock, exhibits of dairying machinery, of which Australia has supplied large quantities to the Argentine in years past, are invited.

Cables advise that the retail butchers of Great Britain have started a strong agitation against the embargo on the importation of Canadian store cattle into the British Isles. They claim that the removal of the embargo would reduce the price of meat, and help to build up the depleted stocks of cattle.

The Ministry of Food, Great Britain, since its inception and until 31st March last, shows an estimated net profit of £912,312, representing less than one-tenth of one per cent. on the total turnover. Purchases of frozen meat to 31st March, 1919, amounted to £197,000,000, on which the profit was 4.45 per cent.

Experiments have been carried out in France and England in the carriage of small fruits to market by aeroplane. Crates of strawberries have been sent to Covent Garden from Paris in four hours. In addition to saving time, the atmospheric conditions during the flight produce the degree of coldness necessary to keep the fruit sound.

A fine performance was put up recently by Mr. Keith Mackay, of Croydon Station, Roeburne, W.A., a son of Mr. S. P. Mackay, in driving from Roeburne to Perth by car in four and a-half days, covering a distance of 1500 miles. No attempt at record breaking was made and no night driving was done. We publish a photograph this month showing the car en route.

A census of live stock in Germany, taken on 1st September last, shows an all-round increase in numbers as compared with figures for the previous year. Cattle increased from 16,388,000 in 1919 to 16,904,000; sheep, from 5,719,000 to 6,630,000; and pigs, from 11,173,000 to 14,269,000. The stocks immediately before the war were:—Cattle, 20,994,000; sheep, 5,521,000; pigs, 25,659,000.

According to Prof. C. S. Plumb, of the Ohio State University, an American Merino ram has shorn 44 lbs. 3 ozs. wool, twelve months' growth. An American Merino ewe is

recorded as having produced a fleece of 27 lbs. 4 ozs., and a Rambouillet ram 40 lbs. The record, though, is said to belong to a Rambouillet owned by the Oklahoma Agricultural College, which cut 46 lbs. 4 ozs. for twelve months' growth.

The Canadian Co-operative Wool Growers' Company Limited has only been in operation three years, and is now marketing wool for some ten to fifteen thousand growers. The primary object of the organisation is to establish a strong and stable market for standard grades of wool. A large central warehouse is being built at Weston, Ontario, where 4,000,000 lbs. of wool can be graded and stored.

Quite recently a herd of wild buffalo was discovered in the Mackenzie River basin in north-western Canada. It numbers over 1000 head, and another herd of similar size is reported to exist further north. These are believed to be the last two groups of wild bison on the American continent. In captivity, or protected under semi-natural conditions, there are at present approximately 7000 buffaloes in Canada and the United States.

A proposition is being vigorously pushed in Canada and the United States for the construction of a deep-sea waterway from the Great Lakes to the Atlantic Ocean. The plan includes deepening the St. Lawrence River to Lake Ontario, and reconstructing the Welland Canal. The opening up of a deep-water channel from Lake Superior to the Atlantic would materially reduce the cost of transport on grain, &c., from the bulk of North America to Europe.

The last season in Canada was a record one as regards agriculture. The wheat yield was 289,000,000 bushels, against 193,000,000 bushels the preceding year; oats, 656,000,000 bushels, against 394,000,000 bushels; barley, 64,000,000 bushels, against 56,000,000; rye, 13,000,000 bushels, against 10,000,000; and flax seed, 11,000,000 bushels, against 5,500,000 the preceding year. Fodder crops were excellent, and returns from dairy and stock above the average. That fortunate country is comparatively strike free also, the main reason being that there are no huge congestions in one or two cities, caused by Government ownership of railways.

Wireless telegraphy as a practical means of bringing the "Never Never" into closer touch with the centres of civilisation is about to be tried out by the Postal Department. The Commonwealth Postmaster-General has authorised the erection of a wireless plant at Camooweal, Queensland, and another at Powell's Creek, in the Northern Territory. Permission to erect a plant at Brunette Downs Station, also in the Territory, was granted some little time back. It is anticipated that when the departmental plants are working many station owners in Western Queensland and right across to Western Australia will apply for permission to erect installations sufficiently powerful to allow them to communicate with either Camooweal or Powell's Creek.

Care of Lambs and Ewes in Time of Drought.

Feeding Twice a Day.

While individual care and forethought may not be possible in handling large numbers of sheep in drought time it should certainly pay with smaller flocks, and in dealing with studs. Mr. A. Hudson, of Greendale, Uranquinty, N.S.W., proved this last autumn and winter, when the Merino and crossbred ewes were lambing, and there was very little feed on the place. At first he followed the practice of feeding once a day at the rate of 1 lb. of hay per head, but later it was discovered that the sheep did much better on a ration of half a lb., served out twice a day. Under this system the sheep were less disposed to roam about the paddocks, thus conserving their strength, besides which the concentration greatly facilitated the work of keeping the flock under constant observation. Any ewe that showed an inclination to abandon its lamb was taken to the homestead or placed in a shed. These were encouraged in every way possible to mother their young, including being given an extra ration. Mr. Hudson found that wheaten hay was relished by the sheep more than oaten. He estimates that by taking this extra care at least 100 lambs that would otherwise have perished were saved.

Personal.

Mr. Keith Angas, of Lindsay Park, South Australia, in on his way home from England via America.

Major Stewart Balmain, of Coolart, Balmarring, Vic., intends to take a trip to England early this year.

Mr. A. G. Leeds, late manager of Dalgety and Co. Limited, Perth, will leave shortly for a trip to England.

Mr. W. D. Davis died at his residence, Thè Gums, Casterton, Vic., on the 4th December, aged 62 years.

Mr. and Mrs. Anthony Kidman have returned to Australia after spending several months in New Zealand.

Mr. R. H. Harrowell has been appointed managing director of William Cooper and Nephews (Australia) Limited.

Mr. George Gibson, eldest son of the late Mr. Thomas Gibson, Eskvale, died at Longford, Tas., on the 29th of December.

Mr. Thomas M. Row, secretary of the British Royal Agricultural Society, has resigned his position after forty-three years' service.

Sir Samuel Hordern, president of the Royal Agricultural Society of N.S.W., returned to Sydney last month after a visit to England.

Mr. James Ryan, of Tara, near Goodooga, N.S.W., died on 25th December, aged 60 years. He had resided for many years in the district.

Mr. E. Lee Steere, of Belele, Meekatharra, W.A., has been re-elected president of the Pastoralists' Association of Western Australia for the current year.

Mr. Andrew Stewart, a pioneer of the Monaro district of N.S.W., died on 31st December at Tyrvine, Bibbenluke, aged 75 years. He was born in Scotland.

Mr. and Mrs. G. N. Magill, Erambie Station, Molong, N.S.W., left for England by the "Orvietto" last month, breaking their journey at Egypt for a month.

Mr. Joseph McKenzie, owner of Bundabulla Station, Brewarrina, N.S.W., died last month, aged 97 years, leaving a family of seven sons and five daughters.

Mr. Basil Murray, who has been managing director of the Western Farmers Limited for the last few years, returned to Perth from England last month.

Mr. Lloyd Jones, of Hambledon Hill, Singleton, N.S.W., left by the P. and O. liner "Morea" for a trip to Colombo early this month, accompanied by his wife.

Mr. John Armstrong, who succeeded the late Mr. T. A. Brodie as manager of Nive Downs Station, has now taken over the management of Lansdowne Station, Q.

Mr. J. E. G. Millett, who retired from the position of manager of the Sydney head office of the London Bank of Australia on 31st December last, died in Sydney on 6th January.

Among the passengers on the s.s. "Makura," which arrived at Sydney on 9th January, was Mr. C. W. D. Conacher, managing director of the North Australian Meat Company.

Mr. G. Jeffrey, chairman of the South Australian Wool Committee, was knocked down by a motor car in Spencer-street, Melbourne last month, and sustained a fractured thigh.

Mr. A. H. Whittingham, M.L.C., of Alice Downs, Queensland, president of the United Graziers' Association of Queensland, left with his wife for Vancouver by the s.s. "Makura" this week.

Mr. Scott, of Messrs. Sinclair, Scott and Co., Mount Leonard Station, Beetoota, Western Queensland, was drowned in the Diamantina River, near Monkira Station, at the end of last month.

Messrs. E. W. Evans, Natal, and A. M. Miller, Swaziland, having visited the Hereford herds of Gunyan, Q., and Tocal, N.S.W., leave for New Zealand this month, and will return to Africa in February.

Mr. G. S. Yonge, a well-known sheepowner from the Straits of Magellan, has been visiting New Zealand. He is taking back with him a large consignment of Corriedale, Merino, and Romney Marsh sheep.

Mr. James Cochrane, of Lochern and Dundonald, Ifracombe, Q., returned to his home last month from a visit to Scotland. He was much impressed with the Panama Canal, through which he made a trip.

Our London correspondent reports a visit from Mr. Norman Logan, of Richmond Downs, Richmond, Queensland. Mr. Logan was leaving for the south of France on 30th November, and expects to return to Australia about March next.

Mr. D. A. White, stud manager for Mr. Pat Osborne, Willeroo, Tarago, N.S.W., returned from England last month. Mr. White, during his stay in England visited all the principal Romney Marsh studs, and made some purchases on behalf of Mr. Osborne.

Mr. Thomas Province, owner of Rosslyn, Eldsvoild, Q., died recently at his home at the age of 85 years. He had lived in the Burnett district since he arrived there in 1858. He is survived by

a son, Mr. Thomas Province, of Wonbah, and two daughters, one of whom is Mrs. T. F. Trail, of Cynthia.

Mr. G. M. Reid, secretary of the New Zealand Loan and Mercantile Agency Company Limited, London, was entertained at a dinner on 8th October by the home office staff on the occasion of his return from his Australasian tour with the chairman of the company. Mr. J. W. McMillan, assistant secretary, occupied the chair.

Mr. Walter Beattie, part owner and manager of Herbert Vale Station, Camooweal, Q., for the past five years, prior to which he was a partner in Eva Downs, N.T., and manager of Alroy Downs, N.T., for seventeen years, is taking a well-deserved rest, and visiting the southern States. He is a brother to the well-known Hereford breeder, Mr. J. A. Beattie, of Gisborne Park, Victoria.

Mr. John Govett, who died last month, aged 88 years, was a pioneer of the pastoral industry in Queensland. His early years were spent on his father's properties near Bendigo, Vic., and in 1863 he went to Queensland and took up Terrick Downs, where in the following year he was joined by his brothers, Robert and Edward. Later others joined them, and the firm of Govett Bros. and Co. acquired at different times Portland Downs, Isis Downs, and Tallundilly (afterwards called Albibo). Also in conjunction with the late Mr. Lumley Hill, John Govett bought Westlands, near Longreach. Other stations that he owned separately were Avington and Culloden. All these various properties were sold at one time and another, and Mr. John Govett's last big venture was the repurchase on his own account of Portland Downs. However, a series of bad seasons brought disaster, and his later years were spent very quietly.

A luncheon was given to Mr. O. Morrice Williams, late general manager of the London Bank of Australia Limited in Australia, on his departure last month from Sydney to Melbourne. A large number of prominent business men were present. In replying to the toast of his health, Mr. Williams, who is a director of The Pastoral Review Proprietary, said:—Australia had not realised that the war meant the destruction of capital; and because she was spared heavy strain at the outset, and had not to pay high rates of interest, she had launched out in expenditure until her borrowing and her increasing load of taxation had to be met with enforced restriction. It would have been better for everybody had she realised at the outset what was involved in a world crisis. Mr. Williams paid a glowing tribute to the way in which Great Britain had helped Australia. The action of the Bank of England when war broke out in taking up the whole burden of the bills which had been drawn upon London had released millions of money, and had made our task in entering the war much easier.

The following new subscribers to "The Pastoral Review" have been received during the month from countries other than Australasia:—Messrs. S. D. Clarke, Highlands, South Africa; Wm. M. Edwards, Texas; Public Library, Grahamstown, South Africa; Major E. G. Clerk, D.S.O., Penicuik, South Africa; Germania Estancia Limited, London; C. M. Bennett, Est. Bella Vista, Uruguay; S. O. Martin, New Hebrides; G. N. Magill, London; J. W. Schabert, Frankfurt; Mrs. A. Vermaak, Steynsburg; Galpin Bros., Dwaal Station; H. W. Watson, Commaadagga; J. H. Mugglestone, Ereldoune; all South Africa. Direcção de Serviços do Fomento, Timor; E. Erdmann-Jesnitzer, Hamburg, Germany.

Visitors to Melbourne Office.—From Victoria: Messrs. H. M. Fraser, Koorah; J. J. Baylis, Pranjip Park; J. A. Beattie, Gisborne Park; R. Inglis, Stony Creek; Captain Colin Chisholm, Khancoban; Mrs. W. P. Robertson, Bacchus Marsh; Dr. Hornabrook, Dr. Lang, F. Bayston, E. Jackson, J. Thornton Ward, H. S. Major, S. V. Stead, Daryl Lindsay, all Melbourne. From N.S.W.: Messrs. A. S. Mackie, Wunnamurra; J. Sloane, Mulwala; D. A. White, Willeroo. From South Australia: Hon. D. J. Gordon, Adelaide. From West Australia: Mr. J. M. Corbett, Telyarup. From Timor: Dr. J. S. Valdez. From Queensland: Mr. John Conrick and Mr. Clive Conrick, Nappa Merrie.

Visitors to Sydney Office.—From New South Wales: C. E. Prell, Gundowringa; Captain Roberts, Gosford; P. H. Morton, Collaroy; F. Pon Bennett, Chatswood; R. H. Dangar, Neotsfield; C. A. W. Holt, Deenderah; B. H. Norton, Wandook; G. Maddison, Killara; H. F. Marr, Petersham; Mrs. C. J. Dangar, Gostwyck; R. Gibson, The Turrets; G. F. Doyle, Cardington Hall; Anthony Hordern, Milton Park; C. Binnie, 4D; G. N. Magill, Erambie; P. H. Cameron, Karoomba; Ronald Mackay, Gunyerwarildi; C. A. Lillingston, Yulgilbar; T. T. Tripp, Rowena; H. C. Wilson and H. C. Wilson, junior, Wyaldra Park. From Sydney: Capt. Owen, s.s. "Nestor"; W. F. A. Larcombe; R. H. Harrowell; J. S. Kuwahara; T. Urabe; F. Nasmith; H. Tanner. From Queensland: W. B. Shade, Glenelg; A. Shade, Glenelg; C. M. C. Knight, Longreach; A. B. Lord, Victoria Downs; A. J. Cotton, Hidden Vale; Captain J. M. Chisholm, Wantalunya; F. Ranson, Brisbane; Rev. Halse; Hy. Friend, Vahreepa. From S.S. Islands: S. O. Martin, Erromanga, New Hebrides. From South Africa: A. M. Miller, Swaziland; E. W. Evans, Natal. From Tasmania: W. MacCarthy, Hermitage. New Zealand: J. O. Coop, Canterbury.



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The primary producer in Australia, more particularly the sheep raiser and the wheat farmer, is up against a solid organisation in rural labour. No one objects to a fair thing in the way of wages and hours of work, but the shearer, the shed hand, the station hand, the harvester, &c., seem to have utterly discarded the principles of "a fair thing," and are openly out for the maximum amount of pay for the minimum amount of work. They are making the running while the running is good, and up to date they have done extremely well—from their point of view. They laugh up their sleeves, and congratulate one another on the "easiness" of their prey, but at the same time they probably realise that it cannot last for ever.

The employer so far has been content to be the "mug," but he only needs to take a leaf out of the book of his adversary (for so labour has created itself) to put himself on a very different footing. Organisation must be met by organisation, and one of the forms it can take is co-operation. As matters are at present if the officials controlling the A.W.U.—or perhaps it would be better to say a few militant extremists controlling the union—decide to serve further extortionate demands on the employers, the latter are practically powerless in the face of the strike weapon. The farmer must have his crop harvested directly it is ready, otherwise he runs daily risk of losing it altogether, and if the sheep-owner attempts to hold out against unreasonable demands, he is quite likely to lose half of his flock and wool, in view of blowfly and other troubles. This the union knows full well, and it usually times its activities accordingly.

Now if the farmer or the woolgrower had some guarantee

that he would not be left in the lurch if he stood out against a strike, the days of the union's monopoly of power would be numbered. One suggestion for woolgrowers is that there should be a special staff of control, with organised plans of operation under the direction of one head office, and ample capital from which to compensate all growers in a strike area for their losses during the strike. Naturally the amount of capital required would be large, but there is a big field to draw from, and if the owners wish to have any peace in their business they must be prepared to put up a big fighting fund. Also a well-paid permanent staff of competent men would be necessary in each State, and their salaries could be paid out of the interest on the investment of, say, half the capital, which might run into a couple of million pounds. The balance would be placed to the strike fund account at short call for meeting compensation expenses, and the fund could be replenished when needed by a call on the subscribers.

Some such directing organisation, together with the compensation funds, would enable woolgrowers to present a solid front. They would know where they were situated, and be in an infinitely better position to withstand the outrageous claims to which at present they are compelled to meekly submit.

Of course, there are numerous details to such a plan, as to how the capital should be raised, questions of policy, as to the rate of compensation, &c., that need to be settled, but the underlying principle is simple enough, and we believe quite as likely as any other method to put a powerful weapon into the hands of the employers. Moreover, the association's—or whatever it would be called—activities need not necessarily be confined to paying compensation and directing the campaign. It could help in other directions, as, for instance, by sending up-to-date and well-equipped spraying plants into districts in a strike area where blowfly might be very troublesome.

It could also help by forming co-operative bodies of men in the more closely settled country to go round the district doing the shearing, and possibly other work for themselves and their neighbours. It should not be difficult to raise a band of thirty or forty men and boys in emergency within a comparatively small radius, and quite capable of putting through satisfactorily a number of small sheds. It would be a different matter in the outside country amongst large properties, but even there the organisation would help, and make it easier to get together non-union teams.

The same principle of co-operation amongst farmers should be adopted; in fact, is already frequently carried out. Farmers and their sons can form local societies, and possess quite sufficient skilled labour among themselves to carry on against a strike if they are properly organised.

Organisation—and capital at the back of it—are the great essentials. The producer has tried to fight strikes without either, and failed miserably. The other side are splendidly organised, and half the reason for the extravagance of their demands lies in the fact that they realise their power and the weakness of the opposition. Once let them find that the grower is getting together in earnest, and they will adopt a much more reasonable attitude. It seems to us that the idea of a central controlling body, with a big compensation fund and wide powers covering the formation and direction of local co-operative or community associations of settlers to do the strikers' work, is the best that has been put forward, and we would be glad to receive any suggestions from readers for elaborating it.

In any case, the time has come to do something. We should not have allowed ourselves to be browbeaten so long, but the question is not what we have done or left undone, it is, what are we going to do? Primary production with the high prices received during the war was a comparatively profitable business, and able to pay the wages asked for less work—as long as the high prices lasted. But heavy losses have been sustained by drought, the wool market has dropped and the general financial situation is very difficult, taxation is becoming heavier and heavier, rail freights are rising, and altogether these are times when it is becoming increasingly difficult for the man on the land to make both ends meet.

Such being the case, any further demands for higher wages or shorter hours or expensive luxuries can only have the effect of driving the producer out of business—unless he is able to win out in a struggle with the union. The only weapons with which he will have a chance are co-operation and organisation. He must take steps to make himself independent of outside labour, and he must be prepared to pay if he wants to win. It may cost him something, but not a tithe of what he will be mulcted for in the long run if he is content to carry on with the present policy of *laissez-faire*.

Registration of Stud Stock

BY "TALGAI."

To successfully carry out any system of breeding with stock of any kind it is necessary to have some permanent and accurate record of the individuals forming such a stud. For the man who is simply running a flock or herd for ordinary commercial purposes, and who annually buys his rams or bulls from some professional breeder, no records beyond those necessary for general information are necessary. By a breeder is meant a person who, whatever species of animal he may select, intends by systematic mating to reach some standard of excellence. This, of course, is only possible by observing through a long course of time the results of certain members of the flock or herd when mated together, and how these act and react on other strains. It is only by finding out the parents of the best of the offspring that any guide can be obtained as to what class of male and female unite to get the result that is being sought.

There are many systems of registration, all of them commendable in their way according to circumstances.

Before entering upon any system it is necessary to study how such a one would work or be suitable to the flock or herd it is intended to use it on. Where a large number of animals have to be handled a system must be simple, quick, comprehensive, and easily followed. There are some very highly worked out pedigree systems of records in vogue in America and some of the European countries, where the numbers to be handled can be counted in dozens, but which would entail so much time and labour if applied to our large Australian stud flocks and herds as to be unworkable. It is also desirable to have the records as simple as possible, so that they can readily be understood and followed on if a change of masters is necessary.

As a basis to all pedigreeing some permanent method of marking each animal has to be adopted, such marks being entered in a book of records, which can then be analysed as much as one wishes. The most satisfactory and generally adopted method is numbered metal tags attached to the ear. A small hole is punched in the ear, and a steel or aluminium label inserted with a number on it. Another method, and one tried by the writer, is tattooing the number on the inside of the ear with India ink with a special instrument made for the purpose. It is not altogether satisfactory, as it cannot be readily seen, and takes too much time to put on.

A method found very satisfactory is this. When the time for marking the stud lambs comes on (and it is generally the case that not more than sixty are running in one paddock), get in one paddock at a time early in the morning, and run off the lambs about an hour before the marking is to start. Put the ewes and lambs in two yards adjoining, and drop one lamb at a time in with the ewes. By carefully watching one can detect different lambs answering their mothers, and these can be dropped over first. When the lamb is mothered it can be marked right away, and the numbered tag put in its ear, the number following on in order from the last number at the previous marking, and having two sets of numbers, starting at 1 for both ewes and rams kept in

two books. As the stud ewes are run in several flocks, such as fine wools, strong wools, &c., the above system can be further extended by having on the label, in addition to the number, the name or number of the sire and a letter to denote the flock the dam was running in. This saves referring to the book where no further information is required. A set of punching tools and labels for this work can be purchased. The same system can be applied to cattle.

Ear marks can be resorted to for second-grade studs to denote the class of rams used or what particular flock the sheep was bred in, but any further information is limited.

If desired, the record book can be ruled into columns, and at shearing and classing time data, as outlined below, can be entered for each sheep. Cattle can be worked much on the same system, except the wording of the books would be different.

The following plan has a scale of five points from 1 to 5, meaning 1, excellent; 2, good; 3, fair; 4, indifferent; 5, bad:—

No.	Sire.	Dam.	Size.	Shape.	Weight Fleece.	Quality Wool.	Length Staple.	Density.	Colour.	Covering on Belly.	Covering on Head.	Consti- tution.	Feet how Stand g.	When Born.	Re- marks.
1	853 Warrior	64	1	1	1b 12	1	2	1	2	2	1	1	1	1917	—
2	101	93	3	4	8½	2	1	3	2	5	4	3	5	1919	Culled

The reading would be as follows:—

Sheep No. 1 is by 853 out of a ewe 64, has excellent shape, carrying a heavy fleece, cutting 12 lbs. of excellent wool, with a good length of staple and excellent density. The colour is good, as is also the covering on the belly, combined with an excellent head and constitution, standing well on the feet.

Sheep No. 2 is by 101 out of ewe 93. The size is only fair, and the shape indifferent, only cutting 8½ lbs. of wool, which, however, is good table quality, excellent length, fair density, good colour. The covering of the belly is bad, the head indifferent, constitution fair, and standing badly on the feet.

Whatever system is inaugurated, once established and provided it gives good results, it is better not to alter it for perhaps a better one.

A system of brands and coloured labels can be used for marking out the different lots for each year's classing, and if clearly and carefully put on are very beneficial.

There are other methods of recording stock, and for those wanting to start a record of their animals they would probably be obliged by asking some of the well-known breeders.

Herd Book.

The above article partly replies to a query we have received from a Western Australian subscriber for a system of record keeping and nomenclature suitable for a breeder starting a stud herd. Mr. Harry Bracker, the well-known Queenslander, and famous judge of beef cattle, also writes:—

"I enclose a leaf from a book designed by Mr. R. S. Maynard, the secretary of the Shorthorn and Hereford Queensland Herd Book, which speaks for itself. Many of the Queensland stud breeders are using this method of recording their pedigrees.

"This book contains space to enter 100 pedigrees of either sex, and can be supplied by him—303 Queen-street, Brisbane—for the moderate sum of 15s., including postage.

"Re nomenclature. My old friend, the late James Tyson, used to say there was nothing in a name unless you had to sign a cheque or back a bill, but I have lived long enough to learn that this dictum does not apply to stock.

"If the name of the home is a euphonious one, it is always advisable to use it with the name of the beast as a prefix or affix, whichever may sound the smoothest, as, for instance, Albany Duke or Albany Duchess, or Duchess or

Duke of Albany, and attach numerals to the subsequent progeny of Albany Duchess, but never alter the foundation initials.

"If the stud is a fairly large one there are hundreds of appropriate names for the foundation families by which they

can be named. By adhering to this method, that is the initial letter of the foundation families, the tracing of the progeny can be more easily ascertained."

Following is a copy of a sample leaf from the book above referred to by Mr. Bracker:—

Name of cow	Sire	{	{	{
Colour				
Date born				
Ear tattoo or number brand				
Branded	Bred by	{	{	{
Bred by				
Herd book No.	Dam	{	{	{
Remarks				
	Bred by	{	{	{

PROGENY.

Date of Service.	Sire Used.	Date Calf Born.	Sex, M. or F.	Colour.	Name.	Ear Tattoo or Brand No.	Brand.	Date of Entry in & No. in Herd Book		Remarks.
								Date.	No.	

Pastoral Problems.

Scabby Faces and Ulcerated Mouths in Sheep.

BY "CROWFOOT."

In good seasons like the present one the above ailment affects sheep, especially young sheep and lambs, the whole face and inside of the mouth along the gums becoming very ulcerated. These ulcers, if not attended to, suppurate and form scabs, then spread. The ailment is more widespread where the lettuce-leaved "sow thistle" abounds, these plants having numerous small sharp spines all along the stems, which easily penetrate the skin, especially about the lips, and there is no doubt that this and other prickly herbs help to start the trouble inside the mouth.

The ulceration is similar in appearance to "thrush" in the human race in babyhood. If the ailment is neglected the whole of the mouth becomes cankered and rots away. The animal in this stage, of course, dies, but in the milder form the mouth is so sore that it prevents stock eating, and they become very weak and poor, and generally unthrifty. It is also a contagious ailment. If you just slightly prick the skin about the mouth, sufficient to bring blood, and then take a little of the pus that exudes from the ulcer and rub it over the scratch, it will also become ulcerated in three or four days. This is one way it is spread. Weaners, when they mob together, often rub their heads and butt at one another mostly in play; if any that have contracted sore mouths come in contact with one that has a perforation of the skin about the mouth the latter becomes inoculated. Also in feeding, some of the grass seeds or thistles become impregnated with the matter from affected sheep's faces, and

it is a wonder that a very much larger percentage does not become affected. A good deal is due, I think, to the blood being out of condition. As I said before, the trouble occurs mostly in lambs newly weaned, and in sheep up to about 4-tooth. Older sheep get it too, but not to the same extent as the teething sheep.

I have always found the following treatment effective if adopted in time:—Take out all the affected animals, and keep them in a hospital paddock by themselves until all the scabs, both inside the mouth and outside, have suppurated, and healthy pink skin taken their place after dressing. The treatment I have found the cheapest and best is as follows:—Put them in a nice clean yard, or on the woolshed battens and have a shallow trough about 5 or 6 ft. long and about 9 in. deep. A hollow gum or box log will do, adzed out in order to remove any splinters and give it a nice smooth surface, so that no germs will find cover. Raise it off the ground a little, and make a hole at one end and a plug to fit tight, then fill the trough about three parts full with "Condy's Fluid" (permanganate of potash), about the strength used for gargling the throat. Have two or three catchers if there are many sheep to dress, bestride the sheep, placing the left hand on top of the shoulder, and with the right hand gently placed on the top of the skull or top-knot, press the sheep's face up to about an inch or so below the eyes into the fluid and keep it there for about ten seconds. Then let the animal go into a separate pen, after first raddling it. When the sheep is let go it licks the outside, and in drawing in the tongue automatically dresses the inside of the mouth. It also gets a little in the mouth while the face is submerged. In a couple of days the skin where scabby will peel right off and as clean as a whistle. I have treated hundreds in this way. A good man can easily do six or seven hundred a day if he has a catcher, and it is not often that there are more than a couple of hundred affected in one flock.

If the roof of the mouth has become putrid by reason of the dressing having been delayed, the best thing to do is to cut the animal's throat and skin it, as the pelt is worth more than the sheep. Slightly and newly-affected ones, however, are cheaply and effectively dealt with in the manner I have mentioned. The dressing should be renewed, and the trough cleansed after about twenty sheep have been dressed. If this is not done it becomes dirty, and healing is always hastened by cleanliness, both in the operator and dressing.

Many owners treat this matter lightly, and leave it to nature to effect a cure, while in the meantime more sheep die than would pay twice over for the dressing, labour and all included.

Motor Trip to Central Australia.

Photographs illustrating portions of the trip taken by Messrs. Wm. K. Mackinnon, Wm. T. Manifold, and Harry H. Peck to the centre of Australia appeared in our December issue, and we are indebted to the latter for the following notes of the trip.

Knowing that Messrs. Murray Auger and Harry Dutton, of Adelaide, got a specially-constructed Talbot car right through to Darwin some seven years ago, Mr. Peck visited Adelaide early in June to make preliminary arrangements, and received very valuable advice from Mr. Auger as to the route, &c. Mr. Sidney Kidman had not at the time returned from his round-the-world trip, but Mr. S. D. Reid, his son-in-law, who superintended his affairs in his absence, kindly volunteered to make all necessary arrangements for the party, including that most important one of sending out petrol right from Farina to Alice Springs, and as all such from Oodnadatta (the head of the line) had to be freighted by camels, it was necessary to do this at least six weeks ahead. Thanks to Mr. Reid's foresight not a single hitch occurred as regards petrol. On Mr. Kidman's return he forwarded letters to his various managers along the track to give the party all and every assistance possible, and this being done to the letter, helped most materially towards the success of the trip.

Starting from Adelaide towards the end of July, Quorn, near Port Augusta, was reached the third day out, and here the car was put on the train for the run to Farina of about 180 miles through the Flinders Ranges, as for a portion of this section, at any rate to some distance beyond Hawker, the season right through the winter had been a wonderfully lush one, and the route consequently heavy. Grass and herbage from Quorn across the Willochra Plain to out beyond Hawker was like a wheatfield, and apparently at its top. Found dairying in full swing through the district. Farms where wheat had been a failure in 1919, in 1920 were paying handsomely to dairy. Though the district is parallel with Broken Hill, and has a similar climate and average rainfall, it is just another instance of the wonderful versatility of parts of the inland of Australia to realise that, given a railway, even dairying can be successfully carried on in favourable seasons where the average rainfall is only on the 10-in. line. Had the settlers hereabouts silos, either above or below ground, to fall back on, many thousands of tons of silage in an absolutely luscious condition might have been conserved against dry times.

From Farina the long trip north by car was commenced in earnest. Hereabouts, and from Parachilna (about 140 miles north of Port Augusta) on, the season for months past had been quite the reverse of that experienced in the Hawker and Quorn districts, and in fact quite below normal, and though the perennial salt bushes, so typical of the Lake Torrens and Eyre basins, were still vigorous, grasses and herbage were very scanty. At Mr. Kidman's big depot station, Mundowdna, from where he trucks the bulk of his cattle south, and which runs right up to Farina, the party were very interested in the construction of an immense tank of 20,000 yards, just nearing completion, scooped out of solid clay by 100 donkeys.

At Marree (old Hergott Springs), where the track from South-west Queensland comes into the railway, a halt was

made for the night, and a very pleasant evening spent with Mr. Allchurch, the genial P.M., who for some ten years held a similar post in charge at Alice Springs. Mr. Allchurch had acted as pilot across from Alice Springs to Darwin on Messrs. Dutton and Auger's trip, and his tips and advice were most acceptable, and proved very valuable to our party, as few, if any, men know The Centre better. Mr. Allchurch's album of photos of the physical features of the country from the McDonnell Ranges right through to Darwin are a revelation.

From Marree to Oodnadatta, some 250 miles, occupied four days, certainly not fast time, but the party were out to see the country, and not to make records, and when it is considered that many sandhills had to be crossed in this section without assistance, including the bad Irrepatanna group of 14 in 9 miles, some of which took 1½ hours to get over, a little over 60 miles per day was not bad going, especially as this portion of the track (except in approaches to odd sidings) had not been used since the railway came into use, some 25 years ago, and often had to be guessed at for miles at a stretch.

The first night out from Marree we camped within sight of the waters of Lake Eyre, and actually slept 25 ft. below sea level, though fully 10 ft. above the level of the lake.

At 43 miles out from Marree the first mulga was passed, and right through to the McDonnell Ranges this great drought-resisting shrub is one of the main features of the landscape, forming almost a thick scrub in many of the sandy sections and flats, but on the gibber steppes and tablelands only to be seen along the beds and banks of the numerous watercourses, which intersect the gibber country in all directions, but which for a very odd and rare water-hole are dry, and only run after very heavy rains. The mulga may be said to be the great stand-by fodder of Central Australia over its long droughty spells, living on when even the hardest salt bushes fail, but in a few narrow belts on Crown Point Station, just over the Territory border, a few miles north of Charlotte Waters, we saw instances of where even the mulga was giving out, but this was where only 3½ in. had fallen in two years and ten months up to our passing through, and close to the telegraph line main track, where these patches had been hammered by feeding-out of the camel trains.

In further reference to the long dry spell experienced right through the Lake Eyre district from Marree to the first crossing on The Finke, at Old Crown Point, some 50 miles north of Charlotte Waters, and over a total distance of 450 miles, only 240 points had fallen at Marree in 1919 and 80 odd points in 1920 prior to our trip. The next section of 200 miles to Alice Springs, and another 100 miles west to Palm Creek, on the Upper Finke, which has a better average rainfall, had (though not so exceptionally light as further south) also gone through a very dry time; but the whole centre is undoubtedly the most wonderful country throughout Australia, and likely in the world, to stand up to drought conditions, for right through the trip every horse we saw was fat, and though the bulk of the cattle were, of course, only in store condition, none were weak, and on Crown Point, after nearly three years drought, they had fats to muster in a few weeks for Adelaide market. Two patches of country between Marree and Oodnadatta, but each only a few miles wide, had had the benefit of some local showers during the autumn and winter, and looked comparatively fresh; these were on Stuart's Creek and Strangeway's Springs Stations, but were the only patches not suffering from drought right through from Marree to the Western McDonnells.

On the fourth day out from Marree we lunched at Allendale Station (the homestead waterhole of which, with Hereford stud cows, is illustrated in your December issue). This property runs almost into Oodnadatta, and is worked in conjunction with Crown Point at Charlotte Waters, 150 miles north, and Bond Springs, in the Northern McDonnells, another 200 miles further, by the Crown Point Pastoral Company. Allendale, being on the railway, forms a good depot for the other properties when sending stock to the southern markets. Mr. Lowe, the manager, is from "the top of the Territory," as Southern Territorians designate the northern

end, and, in passing, we might say here that the southerners generally who have had an experience of "the Top" speak rather contemptuously of it as a stock-breeding country in comparison with The Centre. With its much larger and assured rainfall, it is certainly heavier carrying, but its grasses are rank and sour, and the stock weedier and lighter in bone, compared with those reared on the saltbush and herbage of the open steppes of The Centre and northern areas of South Australia, where the country is so often impregnated with lime or deposits of almost a similar nature. In these comparisons, however, all, in every instance, except the Ord and Victoria Rivers districts, the north-west corner of the Territory, which by consensus of the general opinion of practical men is the pick cattle country of the Territory, and as freezing works develop on the coast, must materially increase in value.

The blooming health of the younger children and babies, whether black, white or brown, right through The Centre struck the party as one of the outstanding features of the inland. Not a weedy one was seen, and generally they were sturdy-looking and plump, and the white ones rosy. Our visit was certainly at the end of the cool season, and the kiddies could not look so well and fresh at the back end of summer, but, taken right through, the particularly dry atmosphere is evidently a big factor towards health.

Oodnadatta, the head of the line, is a straggling settlement of about thirty houses, mostly built of iron, and white-washed to throw off the heat, on an open plain, with a Gidgee Creek on the southern boundary, but, like all the watercourses of the district, only running after heavy rain. The waterhole, now the town dam, on this creek was there before the railway, and probably was the reason for the site of the terminus and town being fixed where they now stand. Old residents say the Gidgee timber, now very sparse on the creek, once extended right around the town, but has since all been used up for firewood, which to-day is a pretty expensive item.

Oodnadatta is the commercial distributing emporium of Central Australia. Two firms, Gepp and Wilkinson and Fogarty and Co., both of whom have big, well-stocked general stores, send out their own camel trains, and also others owned by Afghans, regularly and often with stores and supplies to The Centre at Alice Springs, 350 miles, and to outlying stations on the west, and north-west on the western flank of the McDonnells, and close over to the Western Australian border, and every few months right as far north as Newcastle Waters, 800 miles. In fact, no centre in Australia, outside the capital cities, holds such a wide distributing area. The open spaces around the stores and the railway station are often covered for days with boxes and bales of goods, being got in readiness for the camel trains. Inland Australia owes a big debt to the late Sir Thomas Elder, who first introduced the camel, for without the ship of the desert carrying would be a precarious business throughout The Centre during the dry spells. The camel trains are quite a feature of the track between Oodnadatta and Alice Springs, and strike the southerner, when a fair distance away, as a very picturesque addition to the landscape, especially when met with on the wide open stony gibbers, but no one, after experience, unless compelled to, desires closer acquaintance with camels than is absolutely necessary, as they are not nice animals, though more than useful in dry areas. The biggest train the party saw was just south of Charlotte Waters, with 72 loaded camels on the one string, carrying about 20 tons of stores. These were in charge of "The Gan," proprietor, five black boys, and one lubra. The first camel is led or ridden by a black boy, being specially broken as a leader, the second tied by a light line attached to a knob fixed through his nostrils to the crupper of the leader, and so on right through the whole train, the last being ridden by "The Gan" in charge. This train had a number of spare mare camels, with foals at foot running loose, and as we came up with the car these were loitering back about a mile behind the train. However, when they sighted the car we got good evidence that a camel on the full run and good going can easily put up a 2.30 sprint. On their top they are true runners or pacers, throwing the fore and hind leg of the same side forward at the one time.

The loaded camels of the trains seemed to have little fear of the car, or for that matter of anything else. With very few exceptions, camel teams or trains are managed by, or in charge of, Asiatics, assisted by aboriginal black boys. These Asiatics may be Arabs, Hindus, Syrians, or Afghans, but all are classed as the latter, and known locally as "Gans."

There are big "Gan" camps at both Marree and Oodnadatta, but from the tales the party heard, especially as regards the former, the authorities that be could well exercise stricter supervision in relation to several matters, the law as regards polygamy (or even worse) with girls, white as well as brown, being absolutely flaunted.

One great boon the residents of Oodnadatta have, and that is a decent water supply, laid on all over the town from an artesian bore, and nearly every house has pepper trees and native myrtles around, thriving well, and affording by their greenery a welcome change to the glare of the white buildings. A few homes, too, have nice little lawns of buffalo grass. The host of The Transcontinental, the one hotel of the town, Mr. Cusack, is an old Territorian, having managed Victoria River Downs, the largest cattle station in the world (running over 100,000 cattle) for some years. He is naturally popular with bush and stock people, many of whom come in this way from the far north, and he and Mrs. Cusack looked after us well, especially on our return, when we struck the break-up of the drought and 36 hours of cold rain.

The coolest and most comfortable-looking building in Oodnadatta is undoubtedly The Hospice of the Inland Mission, presided over by Sister Williamson and her jolly and bright little sister from far-off Sydney. The Rev. John Flynn, the untiring working head of that great mission for the advancement and welfare of all who live in the big wide spaces of the inland of Australia, gave us letters of introduction, and we received a warm and homely welcome. On being shown through the fresh-looking and airy ward, we were surprised to find there as a patient, with three or four broken ribs, Mr. Jones, the overseer from Allendale Station, whom we had left there hale and hearty the day before. Half an hour after we left Allendale a bad black boy caught Mr. Jones with his back turned in the blacksmith's shop, and throwing him on the anvil did the damage. This sort of thing is very rare nowadays, the Urabunna and Arunta tribes, which inhabit the country from Lake Eyre to the McDonnells, being mild-mannered and peaceful in the extreme, but this boy was lately down from the Top Territory, and was known to be bad.

(To be continued.)

"Bush Sickness" in New Zealand.

Some years ago we published an article on this troublesome New Zealand complaint, and in response to requests from Victorian and Tasmanian readers, herewith give particulars of further investigations carried out by C. J. Reakes, D.V.Sc., M.R.C.V.S., New Zealand Director-General of Agriculture, and B. C. Aston, F.I.C., chemist to the Department at the Government's Mamaku Stock Farm.

A few words may first be said about what "bush sickness" is. A considerable area of country in New Zealand has, as a result of this complaint ever since its first settlement, been rendered to a great extent unprofitable for pastoral purposes, cattle and sheep after grazing on it for a few months developing a condition of progressive wasting and anaemia, culminating in death if the animal be retained within the affected area.

The period elapsing between introduction on to the area and the first development of clinical symptoms varies in individual animals, age being an important factor. For instance, a yearling steer may show the first symptom in five or six months from the time it is introduced to the district; an older animal, a five-year-old bullock, for instance, will often hold out from two to six months longer, or more, though no fixed period can be laid down. Occasionally individual animals continue healthy for an ever more extended

period. Sheep usually succumb earlier than cattle, and here again variations of time are observed, these, no doubt, being due to individual constitutional idiosyncrasy. Sex also to some extent influences the earlier development of the first symptoms, females, especially immediately after parturition, proving less resistant than males. It also appears to be a fact that lambs brought on to affected country with their dams, shortly after birth, develop the trouble at a less early period than do those born in the district, and whose dams have been depastured there during the whole or a portion of their period of gestation.

A notable fact is that horses are entirely unaffected no matter how long they remain in the district, even though subsisting entirely upon the natural herbage.

When animals are removed to healthy country they quickly recover without any additional treatment whatever, the change of pasture evidently being in itself quite sufficient to gradually restore the system to its normal condition of health. This fact has brought about a method of farming, under which settlers within the "bush-sick" area have in their possession or under lease small areas of outside healthy country to which they transfer their ruminant stock from time to time for a change of pasture, thus keeping them in a more or less continuous state of apparent good health. The labour and expense involved by this necessarily constitutes a serious handicap to profitable farming.

Mr. Aston has carried out a large number of chemical analyses, both of soils, water, herbage, and of the blood, muscles, bones, internal organs, &c., of affected animals. The result points to the fact that there is a deficiency of iron throughout, and experiments have proved that phosphate top-dressings as a class are the best to produce a good palatable pasture, with a great general improvement in quality and quantity, though this alone will not on the badly affected country keep the animals grazed on the pasture healthy, nor will it enable them to rear healthy offspring. The dressing of pastures, however, by phosphates does enable animals to be grazed and kept in health for a much longer period than if no such dressing was practised. If, however, in addition to grazing on phosphate-dressed pasture cattle are drenched for a period with syrup of phosphate of iron when they show signs of going off in condition they may be brought round from time to time, and thereby be kept healthy.

The question, then, arises whether this good effect of the syrup of phosphate of iron is due to the phosphate or to the iron. An extended experiment, in which cattle were supplied with superphosphate dissolved in drinking-water showed that the animals could not be kept healthy by this means longer than a year on untreated pasture, while in another experiment on treated pasture it was found that phosphate of iron gave a much better result than superphosphate.

The direction which the curative experiments have therefore taken, says the N.Z. "Journal of Agriculture" of April 1919, has been towards finding a substitute for syrup of phosphate of iron which will give the same good results, but which does not contain phosphate. In this success has been achieved. The compound most experimented with has been the double citrate of iron and ammonium (the Ferri Ammon. Cit. of the pharmacist). It will be seen that this contains no phosphate, and yet it is quicker and therefore more efficacious even than the syrup of phosphate of iron in bringing back a sick beast to health when grazed on good-conditioned pasture which has been dressed with phosphate.

Inorganic iron preparations have been tried to a considerable extent both as licks, drenches, and medicated drinking water. With licks the best results have been obtained from what is termed the "B" lick, which contains iron in the form of ferric chloride. The composition of this lick is as follows:—Ferric chloride, 4 per cent.; calcium hydrate, 10 per cent.; sodium chloride, 20 per cent.; calcium sulphate and water, 66 per cent. The drawback to the lick is that a certain proportion of animals (about one-third) either take none at all or take it in such small amounts that no beneficial results are obtained.

Summarising the results of the medicinal experiments to date, it would appear that of the inorganic preparations,

while either the administration of (a) phosphates or (b) iron compounds to cattle on phosphate-dressed pasture may enable them to be kept healthy for a much longer period than otherwise would be possible, it is only by drenching with a syrup of iron phosphate that animals may be kept healthy indefinitely or cured of bush sickness. Of organic compounds it is certain that the double citrate of iron and ammonium is a quicker cure for bush sickness than the syrup of iron phosphate. It is probable that other organic salts of iron would be similarly successful.

Forage Poisoning in Stock.

An article by Mr. Alfred H. Pope, appearing in a recent issue of "The Producer," Denver, U.S.A., gives some interesting and practical information on the above subject. In common with America the disease is fairly prevalent in Australia, and is usually diagnosed by the layman as cerebro-spinal meningitis, a form of cerebritis, or staggers. Actually it is identical with the well-known and highly dreaded ptomaine poisoning in man, being produced by exactly the same germ—*Bacillus botulinus*—found in different kinds of fodder.

It appears that a wide variety of feeds, including maize silage, oat hay, oats, bran, wheat screenings, maize, rice, meat, &c., may harbour the germs. Also that under favourable conditions the water supply may easily become contaminated. It has been proved that the disease may be produced in horses by giving them wholesome food and allowing them to drink water in which fodder known to contain the bacteria has been immersed. Horses and mules are more susceptible to the disease than cattle and sheep, it being possible to develop a tolerance in the latter animals to an amount of the poison which generally proves fatal to horses.

Although it is known that the poison enters the animal body with food and water, a physical examination of suspected feeds may provide little evidence of the toxic nature. Rations may appear wholesome, yet be highly poisonous. Visible moulds have always been looked upon by stockmen as the prime cause of many intestinal troubles in horses and cattle, but laboratory tests and field experiments prove that they should be regarded as of secondary importance in outbreaks of forage poisoning. In other words, in cases of forage poisoning feeds free from moulds should be looked upon with as much suspicion as those exhibiting moulds, until their healthfulness has been established.

Ensilage seems to be one of the worst foods for harbouring the bacilli, although, as previously remarked, many other kinds of fodder may become infected. In connection with this point, Mr. E. A. Kendall, senior veterinary officer of the Victorian Department of Agriculture, pointed out that the chief risk with ensilage lies in feeding stuff that has been allowed to lie in the bottom of pit silos year after year. A silo should always be thoroughly emptied before putting in fresh material. Waste left at the bottom for any length of time may breed trouble.

Cases are recorded in America and Australia where chickens are a secondary cause of outbreaks. In a typical instance quoted fowls had been allowed to feed round and roost on an oat stack. When the stack was thrashed the oats were found to be more or less contaminated with faeces. These droppings actually proved fatal to horses when fed on the oats, as did the water in which the oats had been immersed. This must not be taken to mean that all chicken faeces are harmful, but rather that fowls are immune to *B. botulinus*, and may take the bacilli into the intestinal tract and pass them off with the dung alive and unchanged to contaminate otherwise healthy feed.

The symptoms displayed by horses suffering from forage poisoning are fairly characteristic. They consist of varied nervous manifestations, muscular weakness, paralysis, profuse secretions from the mouth and nose, and disorders of locomotion and vision. The body temperature is usually normal or subnormal, and obstinate constipation prevails.

The means of preventing the spread of the disease before immunising serum can be obtained consists of an immediate

change of food. In some cases the detection of the feed causing the illness is almost impossible without scientific assistance; therefore, as a precautionary measure, all feeds should be exposed to the air and sunshine several hours before being fed, if new feed cannot be obtained. In addition to the foregoing directions, the grain and hay may with advantage be immersed in water for several hours. In a series of field experiments carried on at the Universities of Illinois and Kentucky it was shown that the use of immunising serum offers the advantage of an early protection in outbreaks where specific evidence pointing definitely to the poisonous feed cannot be immediately established. Under field conditions the serum has afforded protection against daily rations of contaminated feed known to be responsible for the disease, for untreated, or control, animals succumbed. It is important that mild cases be recognised at once, and treatment commenced without delay. The use of anti-serum in large doses is especially indicated in the treatment of such cases. After the animals are exhibiting all the symptoms of the advanced disease, the serum is not so potent, and sometimes useless. It is most certainly advisable to inject all healthy but exposed animals with the antitoxin upon the appearance of the disease.

The close relation of forage poisoning in animals to ptomaine poisoning in man suggests the advisability of certain precautionary measures by persons handling contaminated forage or grain. Since an animal feed may be highly contaminated without anyone realising it, the practice of tasting or chewing suspicious feeds should be discouraged, as a minute amount of the poison is known to produce serious results, or even death, in man.

Federal Basic Wage.

Its Effect upon Primary Producers.

(Statement prepared by The Producers' Associations' Central Council, N.S.W.)

In presenting the report of the Basic Wage Commission to the Commonwealth Parliament, the Prime Minister drew attention to the effect which the Basic Wage laid down by the Commission would, if given effect to, have upon industry. Mr. Hughes emphasised the fact that wages are necessarily limited by the total amount of wealth produced in any country, and that they cannot by any conceivable means be increased beyond that limit.

The Prime Minister admitted that the basic wage recommended by the Commission could not possibly be applied to all persons, but indicated that consideration would be given to Mr. Piddington's suggestion for a wage of £4, plus a tax of 10s. 9d., the tax to be applied for endowment of the children of employees.

The following figures will give some indication as to the relative value of production and export as compared with the wages which would be payable under Mr. Piddington's suggestion:—

Year.	Total Production.	Export.
1911	£188,595,000	£79,482,000
1912	206,748,000	79,096,000
1913	218,103,000	78,572,000
1914	209,495,000	60,593,000*
1915	251,620,000	74,778,000
1916	270,411,000	97,955,000
1917	283,629,000	81,429,000
1918	298,669,000	113,964,000
—	—	148,565,000
	£1,927,270,000	£814,434,000

* Figures for first six months of 1914 are not included in this table.

Average production, eight years £240,908,750
Average exports, nine years £90,492,666

Basic Wage.

Latest figures show 1,017,000 male employees over 20 years of age, but take the number at 1,000,000.

1,000,000 male workers at £4 per week equals ..	£208,000,000
1,000,000 male workers at 10s. 9d. per week equals ..	27,950,000
	£235,950,000

These figures, however, only relate to male employees over 20 years of age, and reckoning must also be made for female workers, boys under 20 years, and persons engaged in production other than as employees. The latest available figures for this calculation are those of the 1911 census, which will provide a conservative estimate, as the population has considerably increased since then:—

230,732 male breadwinners under 20 years at, say, 40s. per week	£23,996,128
51,177 female employees over 20 years at, say, 40s. per week	5,322,408
108,405 female employees under 20 years at, say, 30s. per week	8,455,590
132,578 female domestics at, say, 40s. per week (including keep)	13,788,112
515,885 males over 20 years, engaged other than as employees, at 90s. 9d. per week ..	121,723,065
72,890 females over 20 years, engaged other than as employees, at 40s. per week ..	7,580,560
1,111,667	£180,865,863

Summary.

The effect of the application of Mr. Piddington's suggestion may therefore be summarised:—

Male employees over 20 years	£235,950,000
Other employees and persons engaged other than as employees	180,865,828

Average value of total production	£416,815,828
of which £90,492,666 represents the average value of exports.	£240,908,750

The high total value of production of the past few years is largely the result of the abnormal conditions which existed, and the future does not appear to hold out any hope that these values will be maintained, but on the contrary wool values have declined, and certain classes are practically unsaleable, and a distinct decrease is noticeable in the value of produce in the world's markets. This justifies the above comparison being made on the average value of production.

Attention is called by the Prime Minister to the probable effect of the basic wage proposals upon the manufacturing industries, and particularly in relation to the question of export. No particular mention is made of the effect the adoption of such a wage would have upon the primary industries, which are responsible for nearly 75 per cent. of the total value of Australian production, and especially upon the agricultural and pastoral industries, which together represent about 52 per cent. of the total production of the Commonwealth.

Manufacturers, and all who are able to regulate the price at which their goods and services are sold, can and do pass on to the consumer the increased cost of wages which they are from time to time required to pay, and the Government immediately passes on in fares and freights any increased wages which have to be paid to railway workers. While the effect of the proposed basic wage upon all industries is a serious one, its full effect, both direct and indirect, will mainly be felt by such primary producers as are dependent upon open markets in Australia and overseas for the sale of their products, and who cannot in any way dictate the price at which their goods are to be sold.

These producers will be called upon to pay increased freights and fares, and increased cost of materials to be used in their businesses, and increased taxation arising out of the basic wage. The wages of their employees will indirectly, and perhaps directly, be affected by the increased wages payable in other industries under the basic wage, but they will have no opportunity of "passing on" such increased charges, which will consequently mean a reduction of their earning power, and undoubtedly result in the ruination of many who during the recent difficult years of drought have had their financial resources strained to the utmost.

Stock figures for New South Wales for the year ended 30th June, 1920, show a decrease of 8,491,834 sheep, 421,923 cattle, and 74,254 horses, involving not only a very heavy loss of capital but also diminished produce in the wool clip. The wool market is at present most uncertain, and crossbred wool, which constitutes about one-third of the total wool pro-

duction of the Commonwealth, is at present almost unsaleable, whilst the values of other primary produce are also showing a distinct decline.

Large Holdings Subdivision Bill and Closer Settlement in New South Wales.

We have been favoured by Mr. Digby N. Johns with a copy of an open letter to the Hon. John Storey dealing with the above subject, and we must say that it appears to us to be the best criticism of the bill and the most practicable solution of the problem of soldier settlement that has been published.

Mr. Johns can speak with authority on the subject, as he has had 30 years' experience of the working of the land laws of New South Wales, and after the Boer War he held the position of District Commissioner for Lands for the Western Transvaal, and drafted the Settlers Law there, which is still in operation.

Little need be said about the Large Holdings Subdivision Bill, which was among the "slaughtered innocents" at the end of the session, and which has caused such a chorus of disapproval all round that it would appear very unlikely that the Government will revive it next session. If they do so it would be amended out of recognition in the Upper House, if it were not thrown out on the second reading. We think the Government's wisest course would be to drop the bill and draft a new one on the principles laid down by Mr. Johns. These principles Mr. Johns lays down as follows:—

1. Absolute right to purchase and free right of sale.
2. Conservation of the settlers' capital.
3. Immediate production.
4. Increase of the settlers' capital by State loans.
5. Power to mortgage.
6. Qualification of "desirable" settlers.

The great importance of leaving the sale of the farms in the hands of the landowners, and the preparation of the land for settlement by the present owners in order to enable the settler to obtain an immediate result instead of having to wait for years for any return for his labour and capital invested is very strongly insisted upon. Attention is very wisely drawn to the failure of all previous Acts in N.S.W. owing to the resumption of areas from the holders of the lands, and the time which must elapse before the farms are open to selection, during which period rabbits and vermin increase and multiply, and make the incoming tenant's life a burden to him, as well as in many cases meaning ultimate ruin.

Mr. Johns gives a very clear and concise resume of the Transvaal Settlers Law, which he found after five years' experience to work very satisfactorily, and then he outlines a scheme of settlement through the agency of the landowners which seems very workable and sound. From a financial point of view it is certainly far in advance of any of the Closer Settlement Acts in operation, and of the drastic proposals of Mr. Loughlin's bill. It appears to us that this scheme would be more advantageous to the State because it will cost less: to the settlers of all kinds, because it will conserve the value of land, and give the newcomers the best chance they could have of making a success of the venture; to the taxpayer because it will not entail State purchase or liability or the issue of debentures, which are bound to depreciate heavily owing to forced sales, and the credit of the State will not be threatened; and to the landholders and mortgagees, because it will mean absolute sales, and will not depreciate the value of lands, but will tend to appreciate them in course of time.

The scheme as we have pointed out works well in the Transvaal, where the country is subject to periodical droughts and as many pests as we have; therefore it should be worthy of a trial here. Our present system is certainly not a success, and the bill recently before the House would only make matters worse.

It is clear that the soldier settlers and others who are seeking land must be provided for, and we think landowners would be wise in their own interests to consider Mr. Johns' scheme, and give it a trial. No doubt if the landowners took it up, the Government would be glad enough to put through the necessary legislation to solve the problem without any undesirable friction.

Wireless Telephony.

Its Application to the "Out-back."

Hand in hand with aviation has come among us another factor in reducing the isolation of out-back, viz., the invention of speech without wires, or, as it is called, wireless telephony.

Demonstrations recently carried out at Melbourne, Bendigo, &c., when speech, singing, and music were transmitted through space over distances varying from 10 to 250 miles, serve to show the utility of this method of communication and the big advantages it possesses over the ordinary telephone system.

Not only is the latter system confined to the points where the wires terminate, but there is the initial expense of erecting and insulating these wires and the recurring expense of maintaining wires, poles, and insulators in good condition, necessitating in most cases the sole attention of a linesman.

With wireless telephony these expenses disappear. The apparatus is contained in a cabinet already wired up, and is forwarded in its entirety to its destination. The only preliminary preparations required are the erection of aerial wires about 100 ft. long, and the construction of a suitable "earth," which is easily made by means of galvanised iron sheets sunk in the ground. Two wires, one from the aerial and one from the "earth," are then connected to the apparatus in the cabinet, and the set after tuning up is then ready for working. The voice is received per medium of telephones with special head-gear. The transmitter is of a type similar to the ordinary post-office pattern. Long cords attached to these instruments enable free movement of the speaker to any part of the room. This type of wireless telephone apparatus can be worked from a house lighting electrical plant, and is of great value as a means of communication between country centres or between different sections of a station or between different stations. Another big advantage in these sets is that they can be supplied in a portable form, enabling transport by motor car, van, or horse-back. Special masts, which are supplied, enable wireless telephone communication to be established by means of these sets within 30 minutes from unpacking.

Wireless telephone apparatus is at the present time used extensively in Canada and the U.S.A. as a valuable aid in fighting forest fires. In the same way it should prove a great boon to Australians determined to overcome the ravages of fire with the assistance of the most modern methods and appliances. In this connection wireless is destined to play an important part, solving, as it does, the problem of instantaneous communication. Look-out posts could be established in considerable numbers to keep watch from the best points of vantage over the country, so that as soon as an outbreak occurs information may be immediately transmitted to the proper authorities, who are thus enabled to take such steps as are possible to rush assistance to the spot to localise the conflagration and extinguish the blaze with the least possible delay. Prompt action is the vital point in such a matter as this. Measures to be effective must be taken before the areas affected have become unmanageable, and the only agent which can execute this task satisfactorily is wireless. Wired telegraphic or telephonic communication is liable at any moment to be rendered useless by the very agency it was invented to combat.

Aeroplanes may prove of valuable service in this connection, but here again for means of communication reliance must be placed upon the ether waves. A number of diffi-

culties have yet to be overcome, however, before the aeroplane can be used with success for this purpose, the main stumbling block at present being connected with the problem of landing.

Whatever may be the outcome of other experiments for protection against bush fires there can be no question that the day is at hand when wired telephones as a means of communication between distant centres in the country will be replaced by the more practical and reliable methods of wireless.

We are indebted for these notes to the Amalgamated Wireless (A/sia) Limited, Wireless House, 97 Clarence-street, Sydney, whose staff of engineers is engaged almost solely attending to the requirements of country inquirers.

Catalogues, &c., will be made available to those interested in the subject on application to that company.

McGarvie Smith Anthrax Vaccine.

Tests in South Africa and South America.

Some time ago the McGarvie Smith Institute, Sydney, supplied the Union Government of South Africa with a quantity of an anthrax vaccine with a view to having exhaustive tests conducted to establish the high qualities of the McGarvie Smith vaccine. Recently the institute received a communication from the Acting-Secretary for Agriculture, together with a detailed statement of results of work completed up to the present, by which it will be seen that, although the vaccine has been subjected to the most severe tests possible, the results have given the highest degree of satisfaction to all concerned.

The Government of the Argentine has also just completed tests on a similar scale, and, although the detailed report is not yet to hand, the institute has received a cable to the effect that results are extremely satisfactory.

Following is the report of the Director of Veterinary Research in South Africa on the subject:—

In carrying out tests of this kind, three questions should be borne in mind—(1) Whether the vaccine produces any ill-effect on the inoculated animal; (2) how strong the degree of immunity is; (3) how long the immunity will last.

Question three cannot be answered yet because these tests will extend over a year or more. The McGarvie Smith Institute itself states that immunity lasts for one year, and possibly longer. We have inoculated a certain number of animals (horses, cattle, and sheep), which will be tested after periods extending up to a year and over.

Question one can safely be answered in the negative. In the course of our tests we have never seen an animal develop any sign of anthrax or show any evil effects of the inoculation.

Question two is the most important. In our initial experiments we injected fairly large doses of vaccine into animals, and found that they showed an almost absolute degree of immunity against virulent anthrax. We then decreased the doses to the amount recommended in the instructions, and again found that the degree of immunity was an exceptionally strong one.

A Soldiers' Station.

Ned's Corner Station, on the River Murray, some 60 miles down stream from Mildura, affords an interesting example of what a party of returned men can do. It was originally proposed to cut the property up into blocks of from 10,000 to 15,000 acres each, but fortunately the men, 22 in number, were able to convince the Ministry that they could work it more economically as a whole. Each had a little capital, and they secured the backing of a wool broking firm, which enabled them to carry on. Last year was their first season, and it happened to be good. The clip exceeded 1000 bales, and the bulk is now sold at an average only slightly below appraisement prices, while some realised the top price at the opening Adelaide sale. The station is a leasehold of some 300,000 acres.

Letters to the Editor.

Sheep's Health and Blowfly.

To the Editor.

Sir,—Referring to the letter contained in your December issue under this heading, Mr. Chambers falls into the common error of assuming that his sheep are in the pink of condition because feed is rich and abundant.

When feed is over rich the liver and kidneys are unable to perform their office of purification efficiently—impurities enter the blood, a fevered condition is set up, and the blowfly is attracted to the sheep.

Many of the original settlers in the western and north-western plains stocked up with cattle because they considered the country to be too rich for sheep. These men understood the frailties and complications of the sheep's digestive system, and were undoubtedly correct in their conclusion, at any rate in good seasons.

In times of semi-drought the sheep are healthier because they take ample exercise in their search for an adequate supply of food. Their digestive organs are not over wrought, and are aided by the exercise taken. Sheep in good store condition only are invariably healthy, and whether the flies are numerous or not they offer no attraction to them.

From investigations made in October on two large western stations it was proved that all the sheep showing attraction to the fly were more or less seriously diseased. The feed was excellent, salt bush abounded, and the sheep were apparently in the pink of condition, as described by Mr. Chambers.

Certain sheep were killed for investigation purposes, and showed:—Lungs, blue spotted and decayed in places; liver, light grey, mottled and decayed; kidneys, light grey, mottled and decayed; spleen swollen, gorged with blood and pulpy. Average temperature of sheep showing attraction to the fly, 106 degs.

Those with the normal temperature of 102 degs. were not affected by the fly. Although these sheep were on country where salt bush was abundant, the blood of apparently healthy sheep showed, on analysis, a serious deficiency of salt, the ash of the blood containing only 43.50 per cent. of sodium chloride. The Pasteur Institute quote 60 to 90 per cent. sodium chloride as being the proportion necessary to maintain the vitality of the tissues of the body. They state that the blood is the sole carrier of the salts, and the only channel through which the tissues can obtain them.

It will therefore be seen that the blood of the sheep from the salt bush country of the Western District was 16½ per cent. deficient in sodium chloride, taking 60 per cent. as being the lowest percentage necessary to maintain the tissues of the body in perfect health.

Their blood was also found to be deficient in iron oxide to the extent of 1 to 2 per cent.

With regard to the salt bush grown on the same area, analysis proved it to contain 1½ per cent. salt. As there was abundance of more succulent herbage available, it is doubtful if the sheep were eating any of this, but even if they were living entirely on salt bush the quantity of salt contained therein would prove insufficient to supply the correct proportion of salt necessary in the blood.

Experiments have proved that to attain this the sheep requires ½ oz. salt daily; therefore it would require to consume 33 1-3 ozs. of salt bush per day to obtain this quantity of salt. Even without any other feed, no sheep would be likely to eat over 2 lbs. of salt bush daily. Therefore, to maintain a proper balance of blood a supply of salt is necessary in all countries and at all seasons.

Years of observation have proved to me that it is only when sheep attain an abnormally high temperature, from one cause or another, that the flies attack them.

Any sheep man could easily test this for himself by killing a few maggot-infested sheep, and noting the condition of their internal organs.

Dead animals of any species are of little value for investigation purposes, and dead sheep are of less value than any other animal.

The reason for this is that the sheep whose temperature is 102 to 103 degs. in health, and 106 to 107 degs. in disease, has a warm fleece, which retains the body heat after death, and so hastens decomposition.

Decomposition is brought about by the invasion of the body after death by bacteria from the stomach and bowels. Such bacteria are always normally present, aiding the digestive processes. Another reason for early decomposition in sheep is the facility with which the bacteria from the bowels are able to penetrate the system. This penetration may even take place before death, and no doubt their high body temperature and consequent liability to premature decomposition is one of the main reasons why sheep are specially susceptible to maggot infestation, although no animal in a fevered state is immune from the attack of the fly.

In the United States cattle afflicted by tick fever invariably become infested with maggots. Any change of diet which tends to allay the fever automatically ends the maggot trouble, which after all is only a minor one.

Dips are no doubt very valuable to eradicate the existing crop of maggots, and so relieve the sheep from the irritation which they cause, but the maggots are not responsible for the death of sheep. It is the fever, brought about by disease, which kills. No dip claims to allay fever or stimulate exhausted digestive organs, and to obtain any permanent relief internal remedies must also be resorted to.

Most pastoralists have used all kinds of sprays and dips for years past, and the general experience is that the relief obtained is only temporary—the flies almost invariably re-infest.

One or two have said that after a thorough spraying with certain dips the flies left their sheep, but more than likely they have to thank some change in the nature of the feed for this result.

My experience has been that the more highly fevered, and therefore the more seriously blown, sheep usually die after such an operation, consequently fewer blown sheep are visible in the flock next day.—I am, Sir, &c.,

S. L. REID.

Carossa, Moree, N.S.W., 3rd January, 1921.

Blinded Soldiers and Sailors.

To the Editor.

Sir,—This is the season of greetings and gifts.

May I send to your readers greetings and ask them to send to me gifts?

These greetings will, I hope, give real pleasure. They convey the gratitude of the soldiers blinded in the war for the sympathy and help which has come to them from all parts of the world. They carry the news that all we hoped for from the training given at St. Dunstan's is being justified by these blinded men in the very wonderful success that they are making of their lives.

I do not think that anyone would say it gets easier to be bravely blind as the years go on. It becomes easier to do things in the dark, but the demand on the will to keep pace with normal life grows greater rather than lessens. Constant effort is extraordinarily exacting, and it is really splendid how the men meet this demand on themselves, keep up their interest in everything and maintain their notable record as workers; some in offices, some practising as masseurs, some as poultry farmers, and others as expert craftsmen.

There are still more than 500 men learning to be blind in our class-rooms and workshops.

The blinded soldiers have created a magnificent record; the plans for helping them back to normal life have worked out better, I think, than anyone dreamed would be possible. I think, too, there is no one who realises what the gift of sight means, and what blindness must mean, who would not wish to help on this work which St. Dunstan's has undertaken.

I trust that any of your readers who are so generous as to respond to this appeal will forward their contributions to me at St. Dunstan's Headquarters, Regent's Park, London, N.W. 1.—I am, Sir, &c.,

ARTHUR PEARSON.

Chairman Blinded Soldiers' and Sailors' Care Committee,
St. Dunstan's, London, 18th November, 1920.

Water Divining.

To the Editor.

Sir,—As there have been of late various letters appearing in your Review touching upon water divining, I thought I would like to chip in, provided, of course, you would grant me space in your journal. Letter writing is not one of my accomplishments, but would like to give you the bare facts as they occurred to my notice.

I have had a contractor here for the past 18 months sub-artesian boring. When I put him on to a site unknown to me, he at once divined it, I not knowing that he possessed the art. Eventually I found this out, and requested him to accompany me to the next site before shifting his plant, which he did. Needless to say, I watched his actions very closely, and the twig at the spot became very active. The result after boring some 200 feet was an inexhaustible supply. I repeated the request at several other sites, and with very little fuss. His remarks were in each case, "tons of water here," and so it proved. I am quite converted to the belief that the method is reliable, at least as far as his divining goes. All his sites put down (except one) are not deeper than 300 ft., the last one just finished being down to 550 ft., water fresh and rising to 100 ft. from the surface, also inexhaustible.—I am, Sir, &c.,

J.W.K.

Queensland, 17th December, 1920.

Sheep, Farm and Station Management.

Those who have not yet secured a copy of the above book should read the following letter to its compiler (E. H. Pearse) by Mr. W. T. Ritch, the well-known sheep and wool expert, who went to the United States from Australia some years ago. He is an eminent practical authority, and his recommendation is good enough to put absolute faith in.

Mr. Ritch says:—

"I have to acknowledge the receipt of a copy of your book, 'Sheep, Farm, and Station Management.' I cannot thank you sufficiently for the latter, because it is not only a valuable and useful addition to my library, but it supplies a much felt want. Very few of the men who will read and enjoy your book will be able to form any idea of the vast amount of time, thought, care, and labour devoted to it. Many people never stop to think of the great difference between the production of a work like yours, and the same number of pages on travel or light fiction.

"Although you are aware of the need of such a book as yours in Australia and New Zealand, I can assure you it is needed to a much greater extent in other countries. Here they have several good books on sheep husbandry, on small mixed farms, but none on sheep raising under pastoral conditions, although more than three-fourths of their sheep are raised in large flocks under such conditions.

"You cannot be too highly congratulated on your splendid book, and those who read it and derive much benefit from the valuable practical instruction it contains, cannot be too grateful to you for its production. In Australia one copy should be kept in every farm, and two copies in every pastoral home, and used as a handbook by the employees. It also deserves a place in every public library and the libraries of agricultural colleges. Elsewhere the library of any man directly or indirectly connected with the wool-growing industry is incomplete without it.

"There are thousands of people in other countries starving for such a book as yours. It gives much fresh and up-to-date information. Other countries have nothing of that kind. Your book ought to have a sale in other countries five times greater than its possible sale within Australia.

"So far I have not mentioned any faults. If you issued a second edition I do not think anyone could reasonably suggest any alteration or improvement. As far as the writing of your book is concerned it is perfect, or as near perfection as possible. Of course we must not forget that it was printed under great difficulties; scarcity of paper, poor variety of paper available, and also printers' strikes. The type is a trifle too small for such a valuable work, but that drawback can be overlooked.

"If you will permit a friendly suggestion I would strongly recommend fresh covers and better binding for any copies intended for sale outside Australia. . . . You must not rest satisfied until your valuable work is found on the shelves of every large bookseller wherever the English language is spoken."—I am, Sir, &c.,

W. T. RITCH.

First Wool Brokerage Company, 511 Continental
Bank Building, Boston, U.S.A.

Motor Notes.

BY "GNOME."

More about Engine Knocks.

At the drawing of stumps last month engine knocking was batting, with only two wickets down, namely—(a) "worn main bearings" and (e) "badly worn connecting rod or big end bearings."

Looking through the list of those awaiting their turn to take a "knock," the second and third names that are down are liable to attract attention. These are (b) "bad crankshaft alignment" and (c) "bad piston alignment," both of whom, if they only tap and lightly stonewall, can very easily put up something in the form of a big score. In making mention of the term "big score" one does not mean what you mean, viz., a cricket score. I am referring to a scored cylinder wall, which, let me add, at times can run up a fair score in the matter of the repair bill! Touching upon the sporting side of things, and still appertaining to matters dealing with "knocks," at the same time without designing to trespass upon "Fife and Drum's" sacred precincts, may I recommend to those who love the glare of the hempen square not to miss the first mill that takes place between Criqui and Godfrey.

It has been my good fortune to witness a few contests that to-day are looked upon as historic. And, like many another follower of the padded mit, I have travelled literally thousands of miles and paid a fiver to see a contest that gave greater pleasure beforehand to the imagination, which was entirely due to the clever engineering of the advertising man, than did the real thing itself. There are many keen followers of the noble art amongst my readers, I know, and to those who should be in the vicinity of Sydney when these two scientists meet, then go—even if it costs you a fiver. The magnificent lighting of the ring, with an unbroken ocean of faces, intermingled with a fair sprinkling of the weaker sex, plus a smiling and enthusiastic Governor-General, and crowned by superb boxing, wonderful speed and extraordinary hitting powers, is a sight that to the real enthusiast should linger in the memory as a milestone for life.

However, those of my readers who are not keen on the game, but keener on the car, will be threatening me with 6-in. by ½-in. bolts, followed by an odd anvil and a hammer or two, so let's to it.

Some of the correspondence that has been reaching me of late from the readers of this journal has not only been full of interest to me, but the appreciative remarks passed by many upon my humble efforts undoubtedly tend to spur one on to improve and out-do all past attempts.

It is very nearly ten years since my pen was first taken up to pen these articles to The Review, and a great deal of water has passed under the bridge in that period, whilst one has covered many, many thousands of miles since, by boat, train, car, and aeroplane. Taking the latter conveyance alone, which is judged by hours in the air and not miles, the distance travelled must be fairly considerable. My "air hours" are small when compared with others, owing to the nature of the work upon which I was employed, but if you multiply 840 hours by, let us say, an average of 60 miles per hour, quite a distance has been covered in four and a-half years. And sixty miles per hour was only an average for a year or so. At times it has been my privilege to fly through the air at anything from 121 to 151 miles per hour. At the time the latter speed was a world's record—in 1918—but to-day a friend of mine, one of those splendid "flying frogs," Sadi Lecoq, by name, holds the record at 202 miles per hour. Some speed, what? And whilst on the subject, may I once more draw the attention of my Australasian correspondents to the fact that Sir Joe Cook demands a "two-

penny" stamp on every reply that is required from me! So let me add, please do not forget the stamped addressed envelope, as it saves time and greatly assists a man who works on an average of sixteen hours per day in search of the "evasive crust." And also please allow me to hasten and say that this does not apply to those splendid correspondents of mine who this month have written me from Otago (N.Z.), Pretoria (South Africa), and Buenos Aires (Argentina). To the latter I offer my sincerest thanks for their splendid letters.

But, to come back to earth, or rather bad crankshaft or piston alignment.

In connection with this particular ailment one is quite safe in saying that for a new car to come into the hands of an owner with such a fault is extremely rare; in fact, in the best motor manufacturing circles "it is not done"!

The initial cause can generally be put down to that "Cinquavalli of tool manipulators," the "Spanner King," who is a lineal descendant of the late Captain Kidd—in short, "The Pirate of the Motor Highways."

Your car is inclined to rattle a little, and glancing through the mileage covered by the old bus since the last overhaul you convince yourself that a complete engine overhaul may not be out of place. And so into the local garage she goes.

Amongst the numerous items to be attended to is the running of new main bearings and big ends, the old ones having reached the crystallised stage, and liable to crack if reassembled. At the completion of the job the engine is naturally stiff, so much so in all probability that the local Captain Kidd decides to tow her in order to start up the engine with the aid of another client's car. You may laugh, but this has often been done. Now, if the car is fitted with a good sound and healthy self-starter everything goes along beautifully for 1000 miles or so, and then one morning you wake up to the fact that the self-starter is not quite as "fresh" as it might be. The "Missis" may have been using the car for shopping the previous day, or you may have used the self-starter frequently at gates, yards, and the such like, adding a little more strain than is usually required at ordinary times.

However, the starter carries over that day, and probably the next, when the handle has to be finally resorted to. And then for the first time you realise how colossally stiff the engine has suddenly become. It has never dawned upon you to test your engine for freeness after the fitting of new bearings or even to test out your compression.

However, when running the car into the Spanner Pirate's stronghold in order to have the generator and self-starter examined, and the battery recharged, mention is made of the stiffness in the cranking over of the engine.

"Oh, that is nothing!" thrusts out Captain Kidd in his usual brusque kid(d)-stakes manner. "You must expect stiff bearings for at least 500 to 800 miles."

"Yes, but my car has covered at least 1200 to 1400 miles since you overhauled my bearings."

"In your case it is different," replies the skipper, steering a few points to port to allow his sta'board broadsiders to come into action. "You see, I took great pains with your job (as seein' as 'oo you are!) and in consequence the bearings were a shade tighter than we usually make them, so as to last you longer. So don't worry about that. They will soon ease up." So off you go.

And still the stiffness continues, and a considerable amount of over-heating takes place. The thing is getting on your nerves, and as a last resort the old numbers of The Review are hunted up to see what "Gnome" has to say on the matter. (You will excuse this little bit of swank, I trust, but it is no good imagining things in halves!)

Something catches your eye in connection with lubrication, and feeling you are on the right track, your pen—any ole pen in such a crisis as this—is taken up, and your troubles penned off to me.

At least that is what one presumes you would do. However, one, "B.J.," of Yeoval, has resorted to this policy, which is evident by the following epistle from him that has recently come to hand. He writes:—"I have been reading

your Motor Notes for some considerable time, and, like a great many of my motoring friends, have been greatly interested in them, as they are not only newsy, but most instructive. I was especially interested in an early article on lubrication, and as I notice you ask motorists to write to you for information, I trust you will excuse my taking this liberty. I have a six-cylinder Studebaker car, 1918 model, which has done about 7000 odd miles. Unfortunately, some time ago I had occasion to run the car into a garage to have the engine taken down. After this it was noticeable that the engine was very stiff, and I could hardly turn it over with the hand. The mechanic who performed the operation assured me that this was all right, and that it would soon work itself free. Since then I have done about 2000 miles, and although the engine turns over easily enough when cold, I have found that after a fast run of, say, 20 miles I can hardly turn it over with the handle. This has me worried, as I am afraid a seizure may take place. Another point most noticeable is this. At the termination of, say, 17 or 18 miles fast running, a distinct knock makes its appearance, and from the heat that comes up from the floor boards the engine evidently runs considerably hot.

"Do you think lubrication has anything to do with it?"

"When I first purchased the car I always used Mobil 'A' oil, but when the engine was cleaned the mechanic put in 'E' oil, and told me to use that for a time until the bearings got worked in. I considered this was too light, so drained it out and replaced with Monogram oil, a slightly heavier grade than 'A.' The engine seems to work well on this, although I notice that the knock takes place earlier, especially on hills well known to me, which means a full retardation of the spark lever. Some time ago, when the motor races were held in Sydney, I noticed that the 'Stude 6' seized in one of the races, and talking about it afterwards to one of the mechanics, they told me that it was caused through not using the correct grade of oil.

"He said that 'A' was too light for fast work. In consequence for a time I used 'BB' grade, but had the same trouble as you refer to in your notes. I presume that the engine has always been stiff to turn over since the overhaul, but using the self-starter I did not notice it until the battery gradually ran down. Since then I have had to use the handle, and in consequence I notice the difference. Do you think there is any danger of it seizing up? And what oil would you recommend?"

"When travelling fast the Monogram oil holds up the pressure better than the 'A' grade oil. After the 'A' oil warms up the pressure gauge drops below 1 lb. per square inch, but with the Monogram it shows over 4 lbs. I presume this is caused by the latter oil not thinning out like the 'A' when hot. Am I right in this?"

Quite an interesting budget of problems, what?

Now, touching upon the stiffness of the engine, well, after my heading in connection with this article, it is more or less obvious. "Mr. Kidd" has assembled the engine with either the crankshaft or big ends out of line, which is due to faulty running of the white metal when casting the bearings or faulty lathe work in the turning up of same, or, and less likely, inefficient bad scraping of the bearing surfaces. Unfortunately, it will be somewhat expensive, but the only way out of the difficulty is to tear down that engine, carefully examine all bearings and their surfaces, and also note if cylinder scoring has taken place. The affected spot, so far as the bearings go, will be quickly recognised from the others by its polished appearance. When the engine is cold during assembly undue stiffness would not be noticeable. It requires a fast run, plenty of heat, then expansion, and the deed is done. So keep an eye on this after a crankshaft overhaul, as it very easily happens.

So far as oil goes for speed work, there is only one in it, and that is Castrol "R." It is very easy to see how it is "B.J." had to resort to a crankshaft overhaul before covering 7000 miles. A jump from "A" to "BB" grade on a comparatively new car is just about the perishing limit! But if that particular car belonged to me I would use Castrol "A" in summer and Castrol "CW" in winter. Well, cheerio!

Literary Supplement.

Sporting Notes.

BY "FIFE AND DRUM."

Holiday Racing in Melbourne.

The holiday racing in Melbourne was not particularly interesting this Christmas, being so utterly overshadowed by the interstate and international cricket, but the sport was much better in Sydney, where the class of horse competing was higher than in Victoria, and runners were also more numerous. In Melbourne, on Boxing Day, we witnessed the performances of a great number of old stagers, standing dishes since these many days past, and their strivings against one another are not exactly conducive to enthusiasm.

In the Hopetoun Cup, for instance, old Lancer Plume, looking well, and finishing strongly, won, all out, by half a length from Democracy, Toison d'Or, Gringalet, Carriole, Amazonia, Star Comedian, and several others, the burden of whose years added together would make quite a respectable total if represented in cash. Not that Democracy is old. He is but five, and is fresh and well. But we have been accustomed to his presence every now and again since he was a two-year-old, with unfortunately only a couple of winning brackets against his name in the blue book of the turf. His owner deserves better fortune, and no doubt this will come one of these days. Lancer Plume is nine years old, and has started on forty-eight occasions, with nine wins. Gringalet we know off by heart, uncertain through his form may be. He is a handsome, and not a very nice natured horse, and he is becoming more and more touchy at the barrier.

Talking of him, his lessee and trainer, Walter Hickenbotham, has definitely retired from his profession. This fact gives one quite a turn, for I myself, at least, have never known the Australian turf without Walter as a worthy ornament to its professional ranks. Walter is well over seventy now, and yet, in my eyes, he seems very little older than he was some thirty-eight years ago, when I first became familiar with his appearance on the course. That was in the eighties, but long ere that period he had given up the art of riding in races for that of training, and I myself never saw him with the colours up. But looking up the old Turf Registers, I find the earliest mention of his name in about 1866, fifty-four years ago. He rode races for old John Tait, amongst others, at that time, and took part on Gunhilda in Yattendon's Cup trial. Times have changed since then, have they not? Strikes were practically unknown in those far-off and happy days. Railways and telegraphs in Australia were in their infancy, and horses and coaches were the best mediums of travel. It was the golden age, and possibly people were happier then than now. The old patriarchal, almost feudal system, was infinitely more conducive to happiness than the present notions of equality and the rights of man. Folk then raced their horses more for the sake of finding out which was the best than for the filthy lucre which they can now stuff into their pockets by their victories, or sometimes through their defeat.

Walter Hickenbotham has seen all phases of turf society during that long space of time, and I'll bet you a dollar that the happiest days of his life were spent when he was Mr. C. M. Lloyd's man, when he travelled from meeting to meeting over the bush roads, when the Christmas suns beat hotly on him, and the winter frosts bit keen, to the detriment of neither horse nor man, whilst Walter was "riding one and leading another." And now the whole thing has become a happy memory. Those were the days of country racing, and it is a pity that they cannot come back to us again. Places like Beechworth had a three days' meeting, and things were merry there as marriage bells. With gold fields worked out, and other industries languishing, Beechworth racing is now reduced to a very unimportant one-day gathering, and the

business of the town seems to be dependent upon a large white elephant of a gaol and a lunatic asylum. Wangaratta, too, had a three-day fixture in sixty-six; a hamlet like Wahgunyah gave nearly three hundred sovereigns for a day's sport; whilst even in my day Wagga had three days, with a fourth thrown in at Yerong Creek, close by. The prize money at Wagga in eighty-seven amounted to seventeen hundred and fifty pounds at their Cup meeting. This year it has fallen to six hundred and ten. "Alas! Her towers are ruinous, and fallen is her pride."

Centralisation is killing country racing, and the totalisator is doing no good to country sport. If racing in country districts is carried on for the improvement of the breed of horse it is failing in its purpose, and some means should be discovered whereby reputable centres for sport should be subsidised by the ruling bodies, so that all heads are not turned only towards the metropolises. Old Walter has seen all the changes of the latter end of the last century and the opening years of this, and he may live to see stranger happenings yet. His head is grizzled but not whitened by the passing of time, his step is elastic, his eye bright, and he has not by any means reached the age of garrulity which is so indicative of old age. He might, with his easy temperament and unruffled conscience, even top the hundred, and we may still see him lead in a winner of a great race, owned if not trained by him, and what a shout of welcome would rend the heavens were the yellow jacket and black cap to reach the judge's box at the head of a Cup field. And meanwhile he can rest assured that many privileges are his, "such as honour, love, obedience, troops of friends," and that he has the goodwill and respect of the entire racing community of the whole of Australia.

But we have diverged, and of malice aforethought, from the racing of the holiday season. Returning to Caulfield, we saw that very speedy three-year-old While unexpectedly struggle home by half a neck in the Malvern Handicap from the ancient and evergreen Sir Ibex. While was reported as not ready for a seven furlong effort, and the general public seemed rather to regard the race as merely a phase in the preparation of the three-year-old for Oakleigh Plates or Newmarket Handicaps later on. But he made every post a winning one, and there was merit in the victory, although it may be discounted later on, if we find that the horse runs better on the big side of condition than when wound up. He is a White Star, and is an exceedingly attractive, free runner. His dam is Hildegard, who was by Charlemagne II. from Watershoot, by Royal Artillery out of Nenuphar, by premonition, and he is a member of the solid Mermaid family. We should never forget that the best horses come from the best families, and Bruce Lowe's figures are a convenient means of identification for the same.

White Star is getting numbers of winners, and you will see that these will continue to increase during the next decade of the horse lives and has any luck. Another of his progeny on the two-year-old races both at Caulfield and at Flemington. This was River Star, a mare that charms me very much. She comes of genuine staying blood, her dam being River Dame, by Positano out of River Trent, by Trenton, her dam a Tosca, of that famous old Evening Star lot which produced Commotion. Although I firmly believe that the staying qualities in a racehorse come, in perhaps 90 per cent. of cases, from the sire, yet there are exceptions, and this No. 9 family is one of them. Staying properties seem to spring from mares of this family with as much certainty as that roses do not appear with the old Vintner mare as their tap root. Let us note all these things carefully, and endeavour not to be led away either by prejudice or by pure theory.

Linass was another very ancient dish to be served up at Caulfield, and it was pleasing, as well as interesting, to see that the little gelding was ridden by Duncan, who, we might most say, learned to ride upon him, and between whom and the horse there must exist a great feeling of fellowship and respect.

The only other item of interest on Boxing Day at Caulfield was the Steeplechase. The particular point of this was that Grand Fleet, jumping like a greyhound, made an example of his field, and won very easily. And the form was rendered much more value at Flemington on New Year's day, when

Berribee, who had run second to Grand Fleet, won, and running away, too, from Cobram, Hobgoblin, and Jether. Berribee is a beggar to pull, and at Flemington was running down some of his fences in an appalling manner. Notwithstanding this handicap, he tore away between each obstacle, and he passed the post many lengths to the good, fairly hauling his rider out of the saddle. We have the makings of a National winner in this big bay gelding if only he steers clear of broken limbs and neck. His rider at present requires exquisite hands, and a spare neck waiting for him in the jockeys' room. The form of both horses enhances each other's merit, for it is only three or four years ago that Grand Fleet, who was then known as Klinger, was easily top weight for the Grand National Hurdle Race, and if he had been blessed with soundness he might have even emulated the deeds of Redleap.

It was fearfully hot out at Flemington on the first day of the year. Everyone felt it, and horses and spectators were all bathed in profuse perspiration. The clerk of the scales was so imbued with the abnormality of the atmosphere that he thoughtfully warned all riders who were going out a quarter or half a pound short of weight that they might lose so much during the races that their bridle might not be able to make up the deficiency. But heat or cold, wind or rain, thunder or lightning, will never deter the public from turning up at Flemington, and there was a wonderful crowd on flat, stands, and hill, and that notwithstanding the fact that thousands gave up racing for the spectacle of Test cricket.

That preliminary canter for the Newmarket, the Standish Handicap, brought out a good-sized field, and betting on the result was brisk and open. The race was again a business of standing dishes. Blue Cross, who is now seven years old, and who must have wonderfully sound limbs, won by half a head from the speedy Lisnavane, who, you may not have forgotten, is half-sister, by Linacre, to Cetigne. She is very fast, and would have won many more races than she has done had she not a peculiar trick of switching her tail. The mare seems to battle it out gamely enough, but she cannot be doing her absolute best with her tail going like a flail. It is a peculiar trait, but one sees all sorts of strange habits and methods pursued by different racehorses. I remember a very game little mare in the Old Country who used to win invariably with her tail cocked right up over her rump, and you might have sworn that she was done to a turn when you first saw her perform the trick. Blink Bonny never ran her best races unless she was switching her tail, not side ways as in Lisnavane's case, but up and down. When she did this, as the "Druid" wrote, "she meant vengeance." Old Ipoh, who is one year older than his great antagonist, Sir Ibex, finished a good third, and ran the best race I have seen him put up down the straight for many a long day. The gelding was foaled as long ago as 1910, whilst Sir Ibex, who was close up sixth to-day, and finishing, came into the world in 1911.

I wish I had a guinea for every furlong these old stagers have run. On present appearances it looks as if they would, like the poor, be always with us, for they are as sound as roaches in wind and limb. What a handsome, noble old fellow Sir Ibex looks as he walks round the enclosure with determined gait, and with the sun lighting up his coat of burnished copper. It is a pity that he should ever wax old, and die. The Bagot was won by the Sydney gelding Amazonia, who, like River Star, runs back to the old Vintner mare, but through another branch, the Josephine-Johanna Southcote family. Amazonia made a waiting race in front, and someone "snaffled" a good stake over his performance.

Sydney Holiday Racing.

The most interesting feature of the fun over there in Sydney was the double success of Fluency in the Villiers Stakes and Tattersall's Club Cup. In the former race the mare beat Cetigne by a neck, although I hear that the old horse had by far the worst of the luck in running. Prince Viridis and King's Word, Ready Aye Ready, Bandurria, Volpi, Braille, and a number of others made up the field, so the win was one of considerable merit. In Tattersall's Cup Millieme, Prince Viridis, Cetigne, Finmark, and others were in opposition, but on this occasion the mare cantered home with five

lengths to the good, but Prince Viridis bled and Millieme injured himself and was pulled up. When I saw the report in the morning papers I at once thought that the horses and their injuries must have been inverted in the telegrams, because there is less than the usual quantity of bleeding blood, if one can respectably use the double affirmative, in Prince Viridis than in most modern racers. I presume he receives the tendency from Hermit through Peter in Petrushka's pedigree, she being the dam of Prince Foote, the sire of the culprit on this occasion, and Orlando.

Glenacre, the Linacre colt from Kummulla, by Grafton out of Miss Melos, won the Carrington Stakes of a thousand pounds, and he promises, I think, to be a capital sprinter. That very useful and taking gelding Beauford, by Beau Soult from Blueford, was third, and as he won the Flying at Tattersall's Meeting afterwards, it makes Glenacre look better than ever. Amongst the two-year-olds Pelaw Main made his bow to the public, and a rare impression he has left, too. He ran third on his first appearance on the Villiers Stakes afternoon, but knocked his opponents into a cocked hat easily in the December Stakes on Boxing Day, giving Woodville three pounds. A couple of days afterwards Woodville, with nine stone up, won the Juvenile Stakes at Randwick, so I think we may come to the acceptable conclusion that Mr. Baron's brother to Richmond Main is something to be proud of. He is a black colt, and if he is nearly as good as his chestnut brother, we will see Mr. Baron smiling contentedly during the next spring gatherings.

Cricket.

Had one chosen, and the Editor had requested it, the whole of this issue could have been occupied with the recent cricket matches. Unfortunately—or fortunately, which?—that august arbitrator will have none of my suggestion, so we must talk about it all in a short enough space. I saw every ball bowled in the interstate match, Victoria v. New South Wales, and can confidently inform you that the best side won, although for a short period Victoria had the game right up their sleeves. Then batsman after batsman kindly did exactly what Mailey asked them to do, ran out and attempted to hit him on the half volley. It is tremendously easy to play the best bowling from the pavilion. No one knows that better than I do, but when you see good batsmen, with their eyes in, rushing out, swiping, and either missing altogether and getting stumped, or being caught in the long field, then one knows that the bowler is smiling to himself complacently, hugging himself, and perhaps giving vent to low laughter as did the Grecian archer when, drawing his bow at a venture in the darkness, he struck Paris to his death "a million years ago." But the arrows of this fellow were blue with mould, whilst Mailey's armour and arrows are burnished very brightly, and he bowled very beautifully.

Then, when all was lost for Victoria, and the match over, we settled ourselves down with extreme satisfaction to watch the allied States battling with their friendly English foe. Both sides were destined to endure some arrows of outrageous fortune ere all was said and done, but the Englishmen suffered from several degrees of worse luck than their rivals. Australia lost the services of Macartney through illness before the match commenced, and Mailey had so strained his bowling arm in the interstate game that he was unable to be made use of at all in his capacity of a bowler. But to counteract this, Hearne, for England, in stooping for a catch, which he missed, ricked his back, and was unable to play again. Of course, he could not be replaced, except with a substitute to field for him, so that England was one man, and a good man at that, short. But then came the particular element of ill luck, which one or other side has always to accept, and that was in the toss of the coin. Armstrong won, and the game was lost there and then for England. And yet that should not have been. An absence of faults would have even defied luck on this occasion. Unfortunately mistakes were not absent. Collins was missed by Rhodes in the slips during the first over when his score was nil, and the usually safe and brilliant Hendren dropped Pellew when he had scored but three. The cards never forgive, nor does that goddess who presides over the cricket field Hearne, too,

missed Taylor, but he had already scored fifty-nine out of his total of sixty-eight, and I fancy that it was not Hearne, but his incipient lumbago, which was the cause of the error.

In spite of these calamities England was in a good position at the end of the first day's fielding and bowling in a hot sun. Australia had only scored two hundred and eighty odd, with six wickets down. Ryder went immediately after starting play on Saturday morning, and things looked very well for the Old Country. Then the unexpected happened, as it so often does at the glorious game. Pellew and Gregory, two young and active soldiers who fought throughout the war, gave as lively an exhibition of batting as has been ever seen in a Test match. I was sweltering in the heat, though sheltered by the historic and wide-spreading elms at Flemington, and anxiously scanned the telegraph board as wire after wire came through telling of the continued all-conquering offensive of these delightful batsmen, and it must have been desperately trying for everyone, bowlers, fieldsmen, and run-makers as well. Then we all streamed back as fast as motor cars could carry us from the races, just in time to find that the Australian score had mounted to one short of five hundred, and that two Englishmen were out for about fifty, and Hobbs and Hendren were gallantly stemming the tide until time should be called for the day.

Then you know what happened. How it rained, as indeed it was bound to do after the moist almost insufferable heat, and the last hope of England vanished. On Monday the game, most unexpectedly, was recommenced before luncheon, and Hobbs and Hendren played most gallantly, going for everything possible, and forcing the runs at a great rate. But that could not last. The pitch was biting, and while some balls flew over the batsmen's heads, others hung, and skill and experience were of no avail. I heard men saying, "why did not the batsmen do this; why did they not do that?" and so on. Well, these critics might have done better, possibly, in the days of their youth, but they were infinitely more likely to have done a great deal worse.

Anyhow, the short and long of it is just this. Australia has won the two first Tests, and unless the luck changes, and gives Woolley and Rhodes and Hearne a chance upon a wicket to suit them, I fancy that Australia will win the rubber, and possibly every match. Our prognostication of last month has come out pretty correctly. England has a tail, and her bowling on fast, true wickets is uncommonly apt to get tied into knots. And the team as a whole lacks those vital qualities, the vim, the snap, and the fire of youth. Douglas is not in form. I think the war has told upon him, and can you wonder? Hobbs is Hobbs, magnificent as of yore, and second to none in the world, either with the bat or at cover. Hendren is glorious to watch—quick, bold, accurate, and aggressive. Russell has not found the pace of the pitches, nor has his eyesight become used to the light. Makepeace is in like case, but his fielding is beautiful. Woolley is as graceful and forceful as he was in 1912 with the bat, and as active and sure in the field, and Hearne was all right in every department until his back gave. But after these the tail begins to make itself felt, although Strudwick played two most gallant innings in the Test. He is a beautiful keeper.

On the Australian side I look upon Gregory as the very nonpareil. Taylor promises to be a great and solid champion, and a magnificent fieldsmen. It was an unending pleasure to watch him out in the country. Oldfield is splendid behind the wickets, and Kelleway, whom the gentle bar-racker seems to have a down upon, is good enough for any team. Bardley's batting and fielding were both as good as you can make them, and his strokes past cover and off his legs were dreams of grace and certainty. Pellew's fielding is a thing never to be forgotten, and is an example to every young Australian cricketer. Park, the ever popular, was most unfortunate to receive a cannon shot of a yorker his very first ball, and Mailey was unable to reproduce his Sydney bowling form, as he was too lame in his right wing to be available.

The umpiring, I thought, was wonderfully good, and I assure you that these officials have a tremendously trying time of it throughout a Test match, and deserve all praise

for their quick, correct, and impartial decisions. It is very wonderful how few mistakes the umpires in Test matches make. So now we will, with lingering backward looks, leave cricket for this month, but I wish you to read the somewhat famous "Ballade of Cricket," which you may never have seen, although I have sometimes quoted a line or two from it in illustration of some point or another.

The Ballade of Cricket.

The burden of hard hitting: slog away!

Here shalt thou make a five and there a four,
And then upon thy bat shalt lean, and say,

That thou art in for an exceeding score.

Yea, the loud ring applauding thee shall roar,

And thou to rival Thornton shalt aspire,

When lo, the umpire gives thee "leg before"—

"This is the end of every man's desire."

The burden of much bowling, when the stay

Of all the team is collared, swift or slower,

When bailers break not in their wonted way,

And yorkers come not off as heretofore,

When length balls shoot no more, ah never more,

When all deliveries lose their former fire,

When bats seem broader than the broad barn door—

"This is the end of every man's desire."

The burden of long fielding, when the clay

Clings to thy shoon in sudden shower's downpour,

And running still thou stumblest, or the ray

Of blazing suns doth bite and burn thee sore,

And blind thee still, forgetful of thy lore,

Thou dost most mournfully misjudge a skyer,

And lose a match the Fates cannot restore—

"This is the end of every man's desire."

Envoi.

Alas, yet liefer on youth's hither shore

Would I be some poor player on scant hire,

Than king among the old, who play no more—

"THIS is the end of every man's desire."

Blood Sires.

By "FIFE AND DRUM."

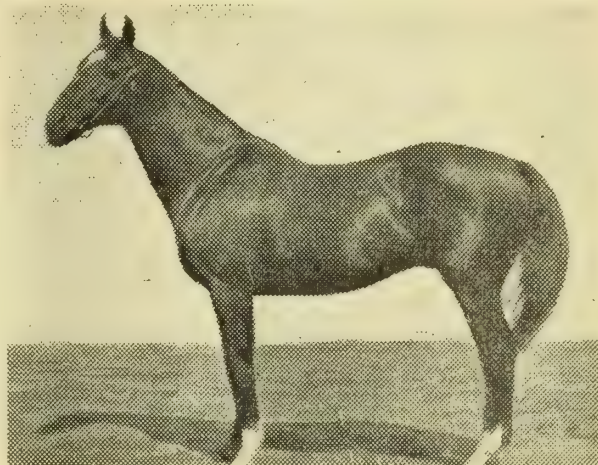
Pendil.

This good horse was bred by the Hon. F. S. Grimwade in 1905, and was sold as a yearling for two hundred and fifty guineas. He had an undistinguished career as a two-year-old, and passed from the ownership of Mr. W. Leeming, his first purchaser, into the hands of Mr. Herbert Power, for three hundred. He did not win a race that season. Next year he opened his account with a win in the Maiden at the Melbourne Cup Meeting, and two days later won the Carnival Handicap, beating Trafalgar, Vavasor, True Scot, Knox, and several others. In the autumn he showed his true worth. The Essendon Stakes, the Australian Cup, and finally the old three-mile Champion Stakes, all fell to his bow and spear. Great performances. As a four-year-old Pendil failed actually to score, but he ran third in the Caulfield Cup, second in the Australian Cup and the Championship, and second in the three-mile A.J.C. Plate at Randwick, where Prince Foote only was one too many for the little horse. A second to Trafalgar in the Randwick Plate was his best performance next year, and there his racing career closed. You can see in that brief summary what a genuine stayer he was, and to beat all the horses of note that he put down so frequently was also a guarantee of much brilliancy.

His chances at the stud have not been very many, but he has sired many winners, amongst which can be named Wooloo, Pendule, Pendilhurst, Dependence, Pendilson, Kikori, Lady Pendil, and many others. Mr. H. Creswick, who owns him, and at whose place he stands, is determined upon doing his

best for Pendil, and Mr. Creswick does attend to his young horses with the loving care of an enthusiast.

You can see for yourselves in the picture what a good-looking, powerful, low-to-the-ground horse Pendil is, and you ought to be able to suit him with mares easily. Look at his pedigree. It is a curiously well-balanced one. His sire, Bobadil, was a Galopin upon Musket, with Steppe out of Hermit's dam thrown in. Pendil's dam is Galopin upon Musket's sire Toxophilite, with two Hermits thrown in. It



PENDIL.

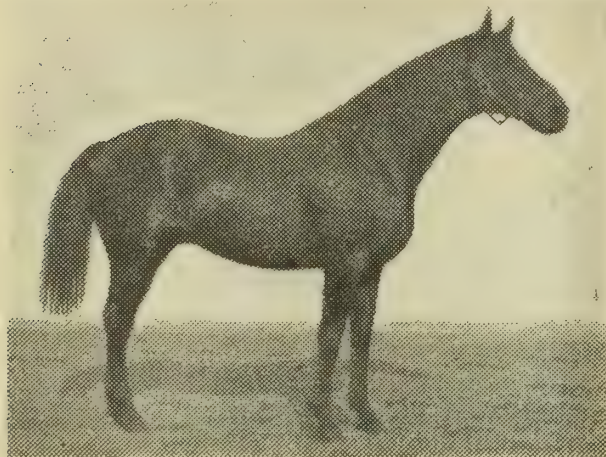
is very pretty, but you must entirely avoid mares with Hermit or Gallinule in them, or you may strike trouble. I don't affirm for a moment that you must, but I say you may. You try him with mares with plenty of out crosses, and you will be all right. The mares run on grand country up at Liewah.

PENDIL, b. 1905 (13).	Penitence	Bobadil (5)	Bill of Portland (26)	St. Simon (11)	Galopin (3)	(Vedette (19) Flying Duchess
					St. Angela	(King Tom (3) Adeline
			Electric Light	Sterling (12)	(Oxford (12) Whisper	
				Beachy Head	(Rick (3) Knight of St. Pat- Beachnut	
			She	Nordenfeldt (13)	Musket (3)	(Toxophilite (3) sis. to Gen. Peel's [dam
	Onyx	(Angler (2) Chrysolite				
	Penitence	Gulliver (9)	Steppe	Saunterer (27)	(Birdcatcher (11) Ennui	
				Seclusion	(Tadmor (12) Mrs. Sellon	
			Galliard (13)	Galopin (3)	(Vedette (19) Flying Duchess	
				Mavis	(Macaroni (14) Merlette	
			Distant Shore	Hermit (5)*	(Newminster (8) Seclusion	
	Land's End	(Trumpeter (1) Far Away				
	Penitent	Hermit (5)	Newminster (8)	(Touchstone (14) Beeswing		
			Seclusion	(Tadmor (12) Mrs. Sellon		
Stray Shot			Toxophilite (3)	(Longbow (21) Legerdmain		
		Vaga	(Stockwell (3) Mendicant			

Owner—Mr. H. F. Creswick, Liewah, Moulamein, N.S.W.

St Alwyne (imp.).

This is the only portrait of the old horse I have seen. He gives you the impression of a good one, don't he? Big, massive, lengthy, masculine, with palpable constitution, and he has proven his great ability up to the very hilt. He was bred in England in 1899, and therefore I am glad I can show you his picture, for, in the usual course of nature, his sands are beginning to run down. He could gallop himself, and in



ST. ALWYNE (IMP.).

England ran on nine occasions, being unplaced only once, and winning the Hastings Plate at Newmarket, run over a mile and a-half, and the Redcar Two-year-old Stakes.

All his get stay, and taking the comparatively limited number of his progeny his winners have been wonderfully numerous. Let me tell you a few of them—Duke Alwyne, Elystan, By-Play, Count Alwyne, Grand Fleet (whom we saw

ST. ALWYNE (7) (imp.).	St. Frusquin (22)	St. Simon (11)	Galopin (3)	Vedette (19)	Voltigeur (2)
				Flying Duchess	Mrs. Ridgway
			St. Angela	King Tom (3)	Fly. Dutchman (3)
			Adeline	Merope	
		Isabel	Plebeian (11)	Joskin (5)	W. Australian (7)
				Queen Elizabeth	Peasant Girl
			Parma	Parmesan (7)	Autocrat (1)
				Archeress	Bay Rosalind
	Lady Alwyne	Camballo (2)	C'mbuscan (19)	Newminster (8)	Sweetmeat (14)
				The Arrow	Gruyere
		Little Lady	Orlando (13)	Longbow (21)	
			Volley	Tingle	
		Y'g Melbourne (25)	Melbourne (1)	Touchstone (14)	
			Clarissa	Beeswing	
Florence A. Stone	Mary Aislable	Malcolm (7)	Slane (25)		
		Dam	Southdown		
			Touchstone (14)		
			Vulture		
		Voltaire (12)			
		Martha Lynn			
		Hump. Clinker (8)			
		d. by Cervantes			
		Pantaloone (17)			
		d. by Glencoe			
		The Doctor (21)			
		Myrrha			
		Actaeon (28)			
		Hentree			

Owners—Messrs. W. & F. A. Moser, Arrowfield Stud, Hunter River, N.S.W.

win over fences on Boxing Day), Little Slam, Lady Medallist, Quarale, Sir Alwynton (a rare good one), St. Medoc, St. Carwyne, St. Vano, Girilah, Amazonia (a good winner at Flemington on New Year's day), Silverton, and for a bon bouche, Nightwatch (winner of the Melbourne Cup), and Poitrel (the champion of the Southern Hemisphere). You know all about him.

I like looking at the pedigree; there is such a peculiar absence of Stockwell and Rataplan to be noted there, and but a single Galopin on the sire's side, although Volley, full sister to Voltigeur, is in the lower removes of Camballo. St. Carwyne, the son of St. Alwyne, who is now at the stud, might make a success, and carry on the line if judiciously mated. There is ample opportunity, for you can simply pile in Birdcatcher and Blacklock, as well as Touchstone. It is quite an unusual table in these days, and I wish we had more of a like nature. But, above all, one wishes that time had not got quite such a long start of St. Alwyne, and that we could begin at the beginning again.

Station Life.

This is the story of station life

Told as it used to be

In the days when the station hand owned his soul,
In the days when a man was free.

The hut was poor and the food was rough,
And the wages none too high,
But a man might take to a station job
And stay till his time to die.

For the runs were wide and the bosses men
Who looked on their men as men
With a will of their own and a love of their work,
As they mostly found them then.

And every man took a pride to know
That the wool had topped the sales,
Or the station horse first passed the post
And drew his weight at the scales.

For boss and men were a friendly lot,
Who laughed at each other's ways,
But stood to each other at every pinch
In the good old station days.

But this is the story of station life
As you mostly find it now;
The boss comes out with a hard-set mouth,
And a scowl upon his brow.

And the men appear in a surly style,
And take no pride in toil,
But waste their time in an endless talk
Of how to get the spoil.

And every job that they're sent to do
Is done with a grudge and curse,
While the boss looks on in a savage style,
With his temper growing worse.

For no one cares if the blanky wool
Should sink in the deep salt sea,
But only asks himself every hour,
"Now, what's in the game for ME?"

So this is the story of station life
As you find it told to-day.
For the delegate preaching discontent
Has passed along this way.

And the good old times when the station folk
Found life so wide and free,
Have passed with the smile of the station hand
To the days that used to be.

—W.M.F.

Mr. W. F. Stone, Uranquinty, N.S.W., died at the beginning of the month, aged 64 years. Forty-two years ago he brought out a number of thoroughbred horses from England for the Oak Hill Stud, Wagga. He has in recent years been buying horses for the Indian market, and was a member of the Murrumbidgee P. and A. Association since 1891.

Agriculture.

Australian Grain Crops.

The Season.

The extraordinary heavy rains that fell in New South Wales during the second week in December do not appear to have done as much harm to crops as at first feared. Serious as the loss has been to individual farmers there was certainly no justification for the alarmist reports published at the time. For instance, Mr. Dunn, the Minister for Agriculture, talked at large of damage to the extent of £5,000,000, which did no good to the State or his reputation. Even in the districts where the worst effects of the storm were felt the actual loss does not exceed an average of a bag to the acre, and in most parts it will not equal a bushel an acre. Considering that up to 6 in. of rain fell over nearly two-thirds of the wheat belt just as the crops were ripening, and that there were very high winds, this is rather wonderful. The northern and central tablelands and slopes seem to have suffered most. Riverina, the big wheat district of New South Wales, escaped the full force of the storm.

An outstanding feature in connection with the storm is the way in which Federation and Hard Federation wheats weathered. These varieties, with their stout and short straw, stood the high winds and rains remarkably well, neither shaking out nor lodging as most others did. The fact that the great bulk of the wheat sown was of one or the other accounts for the smallness of the aggregate loss of grain. There has at times been a tendency to doubt the value of Federation, but after this last experience it will be more than ever the chief favourite with farmers.

Naturally with such heavy rains a good deal of hay was more or less damaged. Grain exposed to the weather was also bleached, which will probably have the effect of somewhat lowering the f.a.q. standard for New South Wales. Crops that were knocked about have been difficult to harvest, but where badly lodged, false combs have generally been used, and the bulk saved after some extra trouble. All this adds to the expense of harvesting, as did the delay caused by the rain itself. Rust has developed in the very late crops, which, by the way, also applies to Victoria. There it is pretty bad in parts of the Western District and north-east.

Two rain storms have been experienced in Victoria, Riverina, and South Australia since last writing, the second, occurring at the beginning of the new year, being the most severe. Then up to and over 3 in. were reported over the main wheat-growing areas of the southern States, while many centres in south, and a few in central-west, New South Wales recorded about an inch. A downpour like this right in the middle of the harvest naturally did a certain amount of damage to crops still in the fields. A quantity of hay has been spoiled, grain bleached, and operations generally delayed. However, as considerably more than half the crops were actually garnered before the second and worst visitation, the total loss will not be great.

Last month we published estimates forecasting an aggregate yield of wheat for the Commonwealth of 130,250,000 bushels. Despite the adverse weather since experienced there seems no reason to alter these figures unless it be to increase the total by a few million bushels. Speaking generally, crops are yielding better than anticipated, which at least equalises the losses due to climatic conditions. Revised official estimates for South and Western Australia have been issued during the last few weeks. The Government Statistician for the West anticipates a yield of 12,177,431 bushels, with an average of 9.8 bushels to the acre. The South Australian Statist expects the yield for his State to be 34,532,540 bushels of wheat off 2,168,412 acres, giving an average of 15.93 to the acre. Oat production in South Australia is estimated at 3,462,410 bushels and barley at 4,332,698 bushels.

All reports agree that the grain this season is a particularly fine sample, and taken all through the f.a.q. standards promise to be high.

Although there are large numbers of unemployed in the cities, labour for harvesting is scarce in many country districts. Farmers are getting over the difficulty to a large extent by helping one another. It means that it will take so much longer to get crops in, but that does not much matter as long as the weather holds.

Recent showers on the Darling Downs, Queensland, came just in time to save the maize, which was languishing for need of moisture. Maize in the coastal districts of all the eastern States is doing well.

The proposal to erect maize-drying plants in Queensland has been dropped by the State Government for the time being on account of excessive expense. The Minister for Agriculture states that at present prices the erection of reinforced concrete silos, drying plants, and machinery could not be undertaken at less than £150,000, which is quite out of the question. However, further inquiries are to be made.

The Pools.

Statistics issued by the Australian Wheat Board show that up to the end of December a total of 508,573,000 bushels have been received on account of all pools, which includes nearly 3,000,000 bushels of the current crop. Wheat and flour shipped overseas was equivalent to 312,565,000 bushels, and grain and local sales were 180,220,000 bushels. Flour stocks represent 870,000 bushels wheat, shippers' and millers' stocks 10,149,000 bushels, and the item "stock adjustment" 4,769,000 bushels. From the tables supplied it appears that the board had on hand at the end of the year some 7,500,000 bushels of old wheat, more than two-thirds belonging to the 1916-17 pool, and located in South Australia. Whether this has actually been sold is not stated. The net overdraft at the close of 1920 was £680,000.

The question of giving more publicity to such matters as sales and freight charters was discussed at the meeting of the board in December. It was then decided that although such information might be welcomed by growers or holders of scrip, it would probably be even more so by competitive countries, and therefore in the interests of producers themselves it was best to withhold detailed news. At the same time it was officially stated that very satisfactory progress has been made in selling the wheat, and that tonnage is plentiful, so much so that chartering for near loading has been discontinued. Present appearances point to the fact that there should not be any obstacles in the way of selling. America is at a disadvantage of about 38 per cent. in exchange, which gives Australian wheat a corresponding advantage in European markets. Although American prices have slumped considerably compared with those ruling three months ago, it is possible to do business with Europe showing a return of over 9s. a bushel f.o.b. Certainly markets have eased, but at the same time freights have also eased, and show signs of continuing to do so.

Another matter considered at the December meeting of the board was finalising the earlier pools. As soon as full returns have been received showing the profits made on diverted cargoes shipped under the 3,000,000 ton contract, a conference of the principal executive officers is to be held and something done.

It has been arranged that the initial payment of 2s. 6d. per bushel on 1920-21 wheat is to be made available on and after 14th January. The new certificates will be divided into three sections. The first will be for the preliminary advance of 2s. 6d. this month, and the second for the second payment of 2s. 6d. due on 30th April. The third section will be known as "certificate for surplus," and will be practically on the same lines as previous certificates. It has not yet been decided whether these "surplus certificates" shall be transferable. As most of the sales to date are at 9s. a bushel or over, they should be worth at least 4s., less charges. The second section, the part for the April advance, will be payable at any bank within the State to which the wheat has been delivered, and will be transferable

by indorsement of the grower. Interest at the rate of 5 per cent. per annum will be allowed on uncashed certificates. Upon the first advance interest will commence from the date of the certificate. Upon the second advance interest will commence from 1st May, 1921, or from the date of certificate, whichever is the later. Interest will cease upon due notice being given by the State organisations.

Up to the time of writing the New South Wales Government has not been able to make financial arrangements for the payment of the extra 2s. 6d. per bushel guaranteed growers in that State. The banks cannot advance the necessary cash, but it is said the Government is considering a scheme which will help farmers to tide over their difficulties.

Mr. Gillies, Queensland Minister for Agriculture, announces that arrangements have been made for the extension of the Commonwealth guarantee of 5s. a bushel to Queensland. The first payment of 2s. 6d. a bushel is to be made as soon after the 14th inst. as possible. A statement regarding the second advance will be made at a later date. Mr. Gillies explains that the belated commencement of operations in connection with the Queensland pool may necessitate some slight delay, but the State board will do everything in its power to arrange for the issue of the necessary certificates at the earliest possible date. The Australian Wheat Board is to have control of the sale for export of any surplus wheat in Queensland.

During a discussion on the Wheat Marketing Bill in the Western Australian Legislative Assembly an effort was made to introduce a clause providing that the home consumption price of wheat should be fixed by the Prices Regulation Commission, or failing that, should not exceed 7s. 8d. a bushel. The chairman of committees ruled that the clause was not relevant to the subject matter of the bill.

Independent advices from London indicate a very flat freight market. The tonnage is said to be far in excess of requirements, and owners have been obliged to lay their boats up. The rate being paid by the Wheat Board has not been divulged, but according to a cable received early in the current month prompt tonnage for wheat from Australia was offering at about 80s. Less than three months ago the rate was 150s. Considerable shipments of new season's grain are being made this month.

Handling and loading costs continue to advance. For instance, the New South Wales State Wheat Office has just entered into a new agreement with the Waterside Workers' Federation as to rates of pay for wheat lumpers at Darling Island. The rate between 7 a.m. and 5 p.m. is to be 3s. per hour, between 5 p.m. and 9 p.m. 4s. 6d., and from 9 p.m. till 7 a.m., 6s. an hour. No doubt many a farmer wishes he could get such pay as this. The rate for handling wheat in Victoria outside the area controlled by waterside workers has been increased to 20s. per day of eight hours for lumpers and 17s. for other casual workers.

An Australian milling firm has received a letter from its London correspondent suggesting that if the Wheat Board intends to insist on all flour orders passing through the London agency an arrangement might be made whereby buyers could still get the brands they had been used to before the control started. It is pointed out that the present non-identification of mill brands is working greatly to the prejudice of the Australian flour trade on the other side. The suggestion seems only reasonable, as everybody realises the value of keeping recognised brands constantly in the market. Millers generally feel very dissatisfied with the handling of the flour trade by the board. As far as Western Australia is concerned, this dissatisfaction has taken the form of an emphatic protest, which, no doubt, will be considered at the next meeting of the board. The Australian Wheat Board, as constituted, naturally considers the interests of the grower first. Primarily it is a seller of wheat, and the miller a buyer, and all things being equal, the grower is likely to get first consideration.

Bulk Handling.

Judging by all accounts the silos erected in the country districts of New South Wales are working satisfactorily. The machinery is able to deal with the wheat as fast as men can empty the bags, 160 being received in twelve minutes in one specified case.

The two Grain Elevator Bills, framed to give the W.A. Grain Growers' Co-op. Elevators Limited powers to justify them in proceeding with a bulk handling scheme in the West, were after all shelved by the Legislative Council. This means that the whole scheme may be wrecked, as it rests largely on the promise of financial assistance by the Federal Government, which promise does not stand good for all time. Naturally the company is doing its best to save the situation.

Markets.

As agreed by the State Ministers and Australian Wheat Board, the price of wheat for home consumption has been raised to 9s. per bushel since the 1st January. About a month ago the board decided to quote wheat for export as flour to South Africa and the East Pacific Islands at 10s. 6d. per bushel. This rate was found to be too high, and recently it has been reduced to 10s., which is said to still be too high to enable millers to do business.

According to the cables the British Wheat Commission reduced the price on all imported wheat by 2s. a quarter as from 31st December. Australian is now 106s. 6d., and a fair business is reported.

Fodder.

The market is somewhat firmer than a month ago. Consequent on the revised rates for flour, bran and pollard have been reduced 25s. a ton in Melbourne. Maize in Sydney has advanced 2s. a bushel, and oats in that centre are also a shade firmer. The following are current quotations for wholesale lots of average quality:—

Melbourne:—Bran and pollard, £7 15s. per 2000 lb.; oats, milling, 2s. 3d. to 2s. 4d., feed 2s. 3½d. per bushel; maize, 5s. 4d. a bushel; chaff, £5 7s. 6d. to £5 12s. 6d. per ton; hay, oaten, £2 5s. to £3, ex rail, new chaffing sheaves £3 to £3 7s. 6d., ex rail, per ton.

Sydney:—Bran £9, and pollard £10 a ton; oats, Algerian, 2s. 6d. to 3s. per bushel; maize, northern rivers, yellow 7s. 3d., white 6s. 9d. per bushel; chaff, interstate, £7 10s. to £8 per ton; lucerne hay, £4 to £6 per ton.

Planting Sudan Grass.

Mr. H. J. Kelly, manager of the Cowra (N.S.W.) experimental farm, gives some useful advice on the above in the "Agricultural Gazette" of New South Wales. He says that to get the best results the land requires to be well prepared by following in the autumn or winter months, and broken down by spring tooth harrows at the approach of spring. Prior to planting the land should be harrowed and brought to a fairly fine tilth. Very rough land may require rolling, and in the drier districts it is preferable in any case to roll the land just before drilling, as the seed can be sown at a more uniform depth when the surface is levelled and made compact, and the rolling also induces the moisture to rise toward the surface, thus further ensuring germination.

Planting Season.

Seed should be sown early in the spring, as soon as the danger of frost is past. Sudan grass should be used as an annual, and it is therefore advantageous to make the season as long as possible by sowing early.

Quantity of Seed to Sow.

This will vary to some extent according to the district in which it is to be sown. In very dry districts, where it may be better to plant it in drills 21 inches apart, 4 to 5 lb. per acre is sufficient, but in districts with an average rainfall of 22 in. and over, up to 8 lb. per acre, sown broadcast or through every hoe of the seed drill, is recommended. When sown broadcast or through every drill hoe, the strain on the harvesting machinery is not so great during cutting as when it is planted in rows some distance apart, the machine being jarred considerably when it strikes the row.

After Cultivation.

When the seed is drilled in, the land requires to be left undisturbed until the young plants are well above the ground and firmly rooted, when a cross-harrowing, to prevent evaporation and level the ground for harvesting machinery, should be given. A similar harrowing is also advisable after each cutting has been removed.

Agricultural Notes.

It is reported by cable that Argentine and North American Syndicates have entered into an agreement to supply Italy with wheat until next harvest in June.

In view of the relatively large surplus of wheat in South Africa, the Union Government is being requested by growers to provide storage and advance cash against sale. The Government is also asked to reimpose the import duties on wheat.

Preliminary estimates regarding the cost of crop production in the United States of America in 1920 show that wheat costs 8s. 9d. a bushel and maize 3s. 9d. a bushel to grow. It is thought that both will sell at a shade higher than these prices.

A cable report states that at the end of the year the drought in India was severe. This is likely to affect the wheat yield, which is harvested in March and April. The Government has arranged to ship 400,000 tons of wheat through the port of Karachi.

It is estimated that the various European countries will require to import about 100,000,000 quarters of wheat during the current season. However, in view of the adverse exchange rate they will probably make do with 70,000,000 quarters. "Broomhall" considers the surplus available in exporting countries to be 90,000,000 quarters.

With the object of stabilising wheat values in North America, proposals have been put before both the Canadian and United States Governments to regulate exports, and also to arrange long credit terms with European countries which cannot pay cash. Any action in preventing exports would probably be of assistance to Australian growers in that it would restrict competition in the world's markets.

The results of the New South Wales Royal Agricultural Society's field wheat competitions, which were judged before the rains the middle of last month, have been published. The prize goes to Mr. Thomas Bragg, Mungeribar, Narromine, with 148 points. Messrs. Martin Bros., Bodangora, Wellington, scored 145 points, and are placed second, while third is filled by Mr. H. K. Nock, Nelungaloo, Parkes, 144 points. Mr. J. W. H. Oates, Narromine; A. Pagan, Gilgandra; and J. W. Eade, Euchareena, were highly commended.

Argentine Grain Exports.

(TO BRAZIL INCLUDED.)

	Total 1918.	Total 1919.	1920. 1st to 22nd Oct.
Wheat tons	2,929,419	3,258,259	5,015,753
Maize tons	647,657	2,374,721	3,151,658
Linseed tons	391,053	840,272	869,087
Oats tons	538,536	331,350	355,885

ACRES SOWN.

	1918-19.	1919-20.*
Wheat	17,175,000	15,132,500
Linseed	3,459,135	3,563,000
Maize		
Oats	3,015,000	2,337,500

* Preliminary estimate.

British Breeds of Live Stock (3rd edition). (Ministry of Agriculture and Fisheries, Whitehall, London, S.W. Price, 3s. 6d. t.) This handbook, originally prepared for the Brussels and Buenos Aires International Exhibitions of 1910, with the special object of encouraging the export of British live stock, has now, for the second time, been thoroughly revised and brought up to date. The first edition of the work was prepared by Professor Wallace, of Edinburgh, and the present work has been revised and written in many cases by Mr. Jonas W. Webb. Thus the mass of authentic information contained in the work is right up to date in the light of recent information. The fine illustrations in the volume are alone worth the published price.

Queensland's Farming Potentialities.

For thirty years we have constantly heard and read statements regarding the wonderful farming potentialities of Queensland. Never an annual show occurs in Brisbane but what Governors and Ministers spread themselves on the topic. The exhibitors of farm products, mostly from Government-supported colleges, are always held up as shining examples. However, what do we read in the annual report of the Department of Agriculture and Live Stock for that State? "The number of people engaged in farming last year (1919) was 32,086, and in dairying 25,675, but the aggregate (57,761) is less by 2358 persons than in 1918, and in that year the total was less by 6259 persons than in 1917." Thus, in two years the rural community, as applied to farming and dairying, is less by 8618 people than three years ago. Drought and scarcity of labour is blamed for this, but the main reason is bad government. First of all, State ownership of railways with want of competition is the main factor. No agricultural community in a big country like Queensland can obtain success against this serious handicap. The second is, no doubt, scarcity of reliable labour; this has been brought about also by bad government in attracting unskilled labour to the big cities, and giving them absurd wages and inducements to keep them there. The third is the disgraceful condition of the country roads. The Queensland farmer has to put up with every discomfort, he has little or no amusement, and the whole fruit of democratic legislation is passed on to him in higher taxation and freights. Even with this, when he does get a chance of recovering himself, the price of his produce is fixed, and possibly his meat is stolen, or rather commandeered, at a Government fixed price! What chance has Queensland to show what her farmers are capable of? Some of the reductions are as follows:—

		Acres.			Acres.
Wheat	1910	106,718	1919	46,478	
Malt	1912	197,160	1919	66,119	
Maize	1915	146,474	1919	105,260	
Potatoes	1915	5,796	1919	4,432	
Sugar	1915	153,027	1919	148,469	

And of all other crops the areas are too small to be worth mentioning. Such is the result of twenty-five years' pandering for votes.

Fat Lambs.

The results of Mr. J. Wrenford Mathews' experiments in the production of crossbred lambs for the New South Wales Department of Agriculture always make interesting reading. The appended table summarises the average live weights and values for the whole series of tests:—

Cross.	No.	Body Weight.		At Sale.	Price.
		At Farm.	yards.		
		lb. oz.	lb. oz.	s. d.	
Southdown x Lincoln-Merino	215	71 9	66 9	19 0	
Southdown x Leicester-Merino	238	72 15	67 1	19 0	
Southdown x B. Leicester-Merino	267	75 1	68 8	19 1	
Shropshire x Lincoln-Merino	226	71 8	65 9	18 10	
Shropshire x Leicester-Merino	237	72 2	66 3	19 10	
Shropshire x B. Leicester-Merino	280	74 14	68 15	19 9	
Dorset Horn x Lincoln-Merino	220	76 10	71 1	20 11	
Dorset Horn x Leicester-Merino	246	77 1	71 0	21 0	
Dorset Horn x B. Leicester-Merino	276	79 8	73 15	21 10	

As Mr. Mathews points out there are almost unbounded possibilities in New South Wales for the lamb-raising industry, especially in districts where sheep are carried in conjunction with wheat farming. The same thing applies in the other States. Export lambs should not exceed 33 lbs. to 40 lbs. dressed weight. The ideal lamb carcass can only be produced by the introduction of the short wool British ram. The ewe should be mated in December to permit of the lambs being dropped as early as possible in the autumn, and marketed at the end of the lactation period in the spring. Naturally the mothers should be supplied with good succulent feed during the period of lactation.

Sheep Farming in Patagonia.

A special correspondent to "The Times," London, supplies his paper with some interesting information regarding the sheep raising industry in Patagonia. From this it appears that sheep farming, from Cape Horn to 40 degrees south, is to-day a prosperous, well-established industry carried on by experienced men on modern lines. Especially is this the case in the district south of 50 degrees, where the land is mostly in private hands, and where the pioneering stage is long passed. The old regime of solitary existence has been broken down by the advent of the cheap motor car, and the visitor encounters farm dwellings with almost every modern convenience, where the men in charge live in real comfort. In many cases the actual owner passes the greater part of the year on his own property.

The farm installations, too, are excellent. The wool sheds are of ample dimensions, with shearing machinery and hydraulic wool presses, concrete swimming baths for dipping, and well-erected yards, all constructed on the Australian principle.

The estates are ring fenced and subdivided with good wire fences, iron standards being used more extensively than wood. The size of the paddocks varies in accordance with the amount of grass and water supply; 5000 acres is a small field, and it is not unusual to find paddocks of 30,000 acres and more, though the general tendency to-day is to reduce the size of paddocks, and to limit the area of estates under one management to 150,000 sheep. A property which will carry a greater number of head than this will be subdivided into two or more sections, each under separate management.

The predominating grasses are white tussock and fescue on the hill lands and meadow grasses on the damp low-lying flats. Some parts carry scrub, which runs from 1 ft. to 3 ft. high, some of which is edible, whilst the rest serves as shelter to the flock from the prevailing cold westerly winds. The carrying capacity of the best farms is about one sheep to 2½ acres, but these are exceptional, and great stretches of the country will only run 1 sheep to 5 acres. Even poorer lands are being fenced to-day. In general, pasture has not greatly improved with stocking, and the carrying capacity per acre has not increased perceptibly in recent years; on the other hand, it has not deteriorated, especially now that the low-lying grounds are preserved as winter pasture.

Some years ago the Lincoln cross was the favourite breed, but the Romney Marsh is an equal favourite to-day. Both give good results and are about equally supported, though a still later fancy is the half-breed of the Corriedale type, which is found to give excellent results, producing a big-bodied sheep with a compact fleece of medium staple wool yielding 50 per cent. of 50's and 56's tops and clipping from 7 lb. to 8 lb. per head.

The fat stock is sold to the local "Frigorificos" (freezing works) at an average price of £1 per head, including fat lambs and sheep, and the farmers themselves are as a rule big shareholders in the works.

The climate is, perhaps, one of the best in the world for sheep raising. A strong cold westerly wind prevails during spring and summer, and in winter a healthy dry cold with occasional snowfalls. A good snowfall ensures abundant grass for the summer and replenishes watering places. Disease is almost unknown, scab being the only bugbear, and this requires continual work and observation to keep it in check. Dipping is necessary at least once a year, even on estates which are free from scab, as it is found that undipped flocks are soon infested with ticks.

The character of the country changes north of 50 deg. and becomes more sandy and drier, with a scarcity of water, especially at any distance from the rivers that cross the continent from the Andes. Stock has to depend upon spring water, which is brackish but quite drinkable. The lagoons are salt and unfit for use. The land in general is poorly grassed, and very few estates carry more than one head to five acres, some even less.

This generalisation holds good, with few exceptions, from the coast to within 50 or 60 miles from the foot of the Andes, where the country improves, with abundance of grass and fresh water, and can compare favourably as regards carrying capacity with the best pasture lands in Magellan. This zone has a decided advantage over the centre and coast lands in that camps can be heavily stocked and the pasture well eaten down, in the security that the following spring will bring a strong growth of grass, following a plentiful rainfall. Over-stocking in the centre and coast lands is disastrous, as pasture takes two or three years to recuperate.

Live Stock in the United States.

Serious Reduction.

The birth-rate of calves in the United States for the first six months of 1920 was 20 per cent. less than for the corresponding period of 1919. As compared with July 1919, cattle decreased 7.7 per cent., sheep 3.3 per cent., and pigs 16.6 per cent. in the year. These figures are taken from official sources, and the reduction is attributed to the growing tendency amongst stock raisers to curtail production on account of unsatisfactory returns. "The Producer," in commenting on the position, says that taking into consideration all known factors, and allowing for a normal marketing during the rest of this year, it would appear that on 1st January, 1921 there will be approximately 6,000,000 fewer cattle, 14,000,000 fewer pigs, and 1,500,000 fewer sheep and lambs than in January 1920. The reduction in cattle will be mainly confined to the beef type, with but little, if any, change in the number of milk cows. On the basis of this estimate the cattle supply on 1st January 1921, should recede to about the number on hand in January 1916, the swine population to the 1914 level, and sheep to the 1917 estimate.

The estimated numbers of stock in the United States of 1st January, 1920 were:—Milk cows, 23,747,000; other cattle, 44,385,000; sheep, 48,615,000; swine, 72,909,000. The largest numbers recorded were:—Cattle (1907) 72,534,000; sheep (1903), 63,964,000; swine (1919) 75,587,000.

British East Africa.

Mr. T. A. Wood, our worthy representative in Nairobi British East Africa, forwards us a most interesting and well illustrated book on "Farming and Planting" in that country, published by Newland, Tarleton and Co. Ltd., land agents, Nairobi. The introduction is written by Captain E. S. Grogan, who some years ago made the trip from Capetown to Cairo, and wrote the most fascinating book of that trip. Captain Grogan, who married a Miss Watt, of Napier, N.Z., has big interests in British East Africa. Of cattle, the book says: "Even during the dry season cattle thrive and keep fat upon the natural grasses in B.E.A. without the aid of any artificial feeding." Possessed of numerous agricultural resources, soil of unsurpassed fertility, abundant water, regular rainfall, magnificent grazing, it makes a strong appeal to the Britisher seeking a new home.

In referring to sheep, the book says: "Current prices for sheep are:—Good grade ewes, 16s. each; hoggets, 13s. 4d. wethers, 16s. to £1; grade rams, £2; Merino flock rams £4; native sheep, 10s. The cost of running a small flock of 2000 sheep for one year in labour and food is, roughly: Labour, £45; dips, &c., £40; shearing, repairs, &c., £15-£100, or 1s. per head, not including white supervision. Good shearers, 2s. 8d. to 4s. per 100 sheep. Percentage of loss through disease, &c., 6 per cent., excluding weaned lambs."

The book is full of interest from beginning to end, and shows what marvellous strides the protectorate has made since the war.



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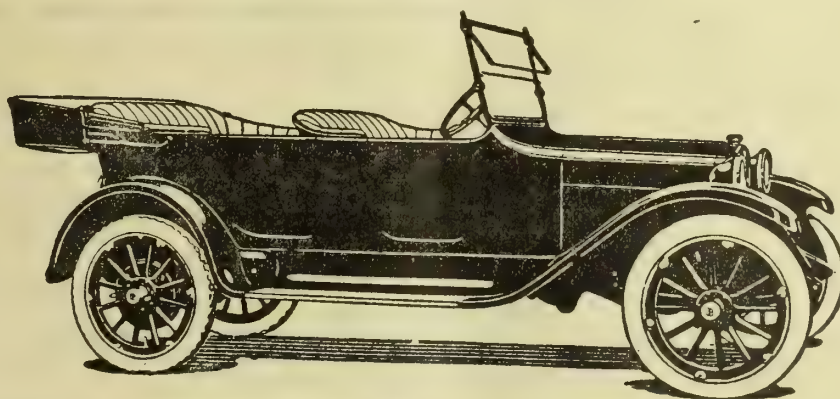
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BRISBANE—398/400 Queen Street. H. W. Byram, Manager; A. E. Norden, Asst. Manager.

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The Wool Trade.

The Wool Trade in Australia and New Zealand.

With the new year, one's thoughts naturally turn to the future, and it must be admitted that just at the moment there is every need for a healthy optimism. There is, however, a growing feeling, at least so far as Merinos are concerned, that the bottom has been touched, and a more stable basis of values may be looked for.

Prices at the beginning of 1920 were phenomenally high, and naturally the swing of the pendulum must be correspondingly far in the other direction. Trade as a whole has been so distorted that the ordinary basis of comparison cannot be applied, and the inevitable reaction after the fever of the past year had run its course had to be faced.

It is also impossible to say whether the true economic level has yet been reached in any market, as even cost of production is powerless against the absence of demand.

However, it is quite within the region of probability that as the boom in prices was overestimated, so may the depression be, and when the general fall in prices creates a demand, as it will do, we may look forward to a stable basis of values for low grade wools, provided always that the intrinsic value is also present.

The history of the month is mainly bound up with the development of the Australian wool realisation scheme propounded for the handling of the carry-over wool out of the various clips purchased by the Imperial Government.

The scheme has naturally come in for some caustic criticism from the Yorkshire newspapers, who profess to see in the proposal an attempt to corner the wool market, an absolutely absurd contention. Much play is being made of the statement made on this side early in 1920 that Australian woolgrowers, if united, could dictate the world's Merino prices. As pointed out at the time, it was an unfortunate remark, in addition to being an impossibility, and was not meant to be taken literally—but any stick is good enough to beat a dog with.

What the critics have not recognised is that the scheme is one of defence, not offence, but it is practically certain it will be accepted subject to the British Government imposing conditions insuring that the British will have a share in the scheme, and that the assets shall be properly handled and hold full value.

Minister of Munitions Reviews the Scheme.

The Minister of Munitions reviewed the exchange of the communications between the British Government and the Commonwealth in respect to the scheme, giving some interesting figures as to profits.

He stated, *inter alia*, that the profits on Australian wool sold since 31st March, 1919, had been very large.

The present position was that all Treasury advances for the purchase of about 7,000,000 bales of Australian wool had been repaid with full interest, and a substantial surplus of assets stood in the books free of cost, consisting of about 1,800,000 bales of wool and a large sum in cash over and above all liabilities. The accounts to 31st March, 1920, were subject to audit, but the result was known with sufficient accuracy. Taking the wool at purchase price, plus transport charges when incurred, the surplus assets of the Australian section of the wool purchase account were estimated at £56,000,000 sterling, Australia's share being £28,000,000.

Commercial Opinions.

The Australian Press Association cables that in London commercial circles there is a large volume of opinion which supports the Government Wool Department's policy of attempting to arrest the downward course of wool prices, and Australia's proposals are likely to be sympathetically received, now that it is known that the scheme does not involve the resale to Australia of any Government wool, either at £12 10s. a bale, or at any other price. Experts consider that prices have been pushed down far enough, and any further substantial decrease will cripple the sheep industry.

Official circles in London do not believe that the association will attempt to impose high prices, such attempt being impossible owing to the present condition of the markets and finance. It therefore can be assumed that the object of the Australian growers is to obtain a market for inferior wools, which otherwise would not be saleable. Australia knows that it must sell cheaply, as the other Dominions and South America are extremely anxious to sell wool. There is every reason to believe that the new association will be conducted on moderate, businesslike lines, seeking reasonable prices.

Wool for the Continent.

Doubtless, one of the first aims of the directors of the association will be to extend credit to Continental manufacturers under recognised safeguards.

In this connection it is of interest to learn the British Government has contracted with Poland to sell 35,000 bales of Australian and New Zealand wool for £1,150,000. The transaction will be carried out in connection with the British relief credits, Britain receiving as security certain Polish bonds. The deliveries of wool will commence immediately.

London Wool Sales.

Cabled reports of the London December sales, which closed on the 17th of that month, report an improved market for free Merino, *i.e.*, wools out of the current clip, some 5200 bales of Australian Merinos being submitted. Practically all were cleared at about 15 per cent. above the prices ruling at the last free sale, bringing prices to about par. Government reserves were in good home demand, and there were more Continental orders, both on account of German and Belgian buyers. The following prices were realised:—Murgu, Murchison, 26d. to 24d.; Bangat, 33d. to 30d.; Gibb, 45d. to 42d. (scoured); Carandotta, 48d. to 44½d.

Government wools closed practically unchanged from the opening. A total number of 52,595 bales were offered, but three-quarters of the number were unsold.

The January series in London opens on 12th inst., when it is hoped the improvement above referred to will be maintained, particularly in view of the better tone displayed in the inquiries locally for Merino parcels passed in at auction.

Final Appraisements.

The final appraisal of delayed wools has been held, and the Central Wool Committee has notified that no further appraisements will be conducted in the Commonwealth by it, also that any wool not yet appraised is now free. The Customs Department has been so informed, and requested to permit the exportation of any wool and sheepskins, for which application may be received without requiring exporters to furnish statutory declarations giving particulars as to date of shearing.

It is understood that the payment of 10 per cent. retention and 2 per cent. equalising dividend on these delayed wools will be available during the current month.

So ends the Imperial purchase wool scheme as far as appraising is concerned, and the task now remains of liquidating the carry-over wool.

American Tariff.

The return to power of the Republican Party in the United States has been followed, as already foreshadowed in these columns, by the introduction of a bill to impose an import duty on wool. [No official advice as to the amount of the proposed duty has been received by the American consul in Melbourne.—Ed.]

What effect this will have on Australian wools remains to be seen. On the last occasion when a duty was enforced in America, the United States buyers confined themselves practically to the top lots. During the appraisal scheme, however, they were able to make themselves conversant with lots lower down the scale and, probably would have been good bidders on lots other than the choicest. However, their competition in the past on suitable wools was so keen as to virtually amount to a monopoly, and doubtless will be so again, even under the conditions referred to above.

By the way, some growers in the south-east of South Australia have been shipping coarse crossbred wools to the States for realisation. From all accounts received from

America, this is another instance of sending coals to Newcastle, as stocks of South American wools held, practically all coarse crossbreds, are the heaviest on record, and a drag on the market.

Japan.

The New South Wales Commercial Commissioner in the East has informed the Premier of that State that the Japanese woollen interests have formed a Textile Manufacturers' Association, and have agreed that no further purchases shall be made by any mill in Japan until the present stocks are used up.

"The Government, I am informed," he adds, "has also agreed that no purchases shall be made outside Japan until stocks held by the mills are consumed, which really means that any requirements for Government mills will be first met by buying up stocks held by the mills forming the association. It is estimated that Japan has still sufficient wool in stock to carry on for the best part of a year. In these circumstances, Japan will not, I fear, be very prominent at the Australian wool sales during the remainder of this year, and the early part of next year."

A Crossbred Pool.

A conference of growers of crossbred wool was recently held in Melbourne, and was attended by delegates from the leading graziers' associations from all States of the Commonwealth. It was affirmed that it was desirable that a crossbred wool pool should be formed, as also that a committee be appointed for the purpose of watching over and forwarding the interests of growers of crossbred wool. It was stated that the question as to whether the proposed pool should be voluntary or compulsory would be left to the committee to report upon, the nucleus of which was appointed at the meeting.

There is difficulty in realising how any pool can be successful without compulsion, and it may also be pointed out that as regards the two pools now running, viz., butter and wheat, both deal with primary produce that is in demand—this cannot be said of crossbred wool.

However, any organisation that can help the woolgrowers is worthy of good support, and it is to be hoped the committee may be able to devise some practical plan of coping with the position.

Fellmongers and Surplus Profits on Skin Wool.

The claim of the various fellmongering firms against the Federal Government in respect to their right to participate in surplus profits on skin wool appraised in the seasons 1918-19 and 1919-20 came up before the High Court last month. However, it did not get past the stage of the claimants accepting the offer of the Commonwealth Government to be responsible for the payment of any claims allowed by the court.

Financing the New Zealand Clip.

Woolgrowers in New Zealand have been strongly advised from various quarters not to sacrifice their wool this season. The Prime Minister says there is a strong reason for this in the fact that the Imperial Government is holding a large stock of New Zealand wool very firmly, but the maintenance of the present level of prices must depend to some extent upon the action of the New Zealand growers. If growers sacrifice their wool at too low values, for the sake of getting it off their hands quickly, it will be playing into the hands of buyers who make speculative purchases in order to enable those growers who need immediate financial relief to obtain it.

The New Zealand Government, therefore, has, after conferring with financial houses, made arrangements with the banks under which growers will obtain advances from their

brokers, or direct from their banks, up to whatever is a reasonable limit in each case. Amending regulations to the Finance Act have, therefore, been made, extending the limit of the bank note issue of banks by adding to the total amount of all coin, bullion and public securities held by each bank (including the amount of all war loan advances as defined in the Act) the amount of all wool advances made by the bank and from time to time outstanding.

The term "wool advances" means such advances on wool as the bank may make on separate account (1) to producers with or without a Government guarantee or (2) to approved mercantile houses whose ordinary business includes advancing against wool. It is the smaller growers in the South Island who mostly grow crossbred wool, as well as almost the whole of the North Island growers, who are most affected by the present prices of wool, and it will be some satisfaction to them to find that they are not necessarily compelled to sell at the present time.

Australian Sales.

No sales are being held on the mainland during the current month, but 12,000 bales will be submitted in Tasmania at the end of the month, although in view of the dislocation of shipping consequent on the stewards' strike, buyers may not be able to attend.

For February 120,000 bales have been allotted to the various centres, as under:—Sydney, 47,000; Victoria, 33,000; Brisbane, 20,000; Adelaide, 10,000; and Western Australia, 10,000 bales.

At the end of the year it is understood that some 830,000 bales were held in brokers' stores at the various selling centres, and as only some 240,000 bales had been disposed of locally since the 1st July last, it will be seen that the realisation of the current clip must inevitably be a long-drawn-out proceeding.

No actual figures of the sales of 1920-21 wool in London are available at the moment, but probably they would not exceed 25,000 bales.

Auctions in London this week include 37,800 bales of free Australasian wool.

Sydney.

The year's operations came to a close in Sydney with the termination of the fifth round, sales commencing again in the first week of February.

Sales of wool from the 1st July last to the 31st December total 88,124 bales, as against 357,669 bales handled during the corresponding period of the 1919-20 season—a decrease of 269,545 bales.

The total arrivals of wool in Sydney for the same period were 481,980 bales, as against 580,340 bales in 1919—a decrease of 98,360 bales.

Victoria.

The December series embraced an average collection, but the market was distinctly lower all round for all qualities than in November, with, however, rather wider competition on the best lots towards the close.

Some of the leading prices in Melbourne were:—Moora-mong, 47d.; Warrock, 46½d.; St. Marnocks, 40½d., all Western District wools; and in Riverina, Barratta, 34d.

Geelong followed on with a really good show, of which some of the leading prices were:—R/Carnham, 47d.; Ware, 45d.; KK/Gorinn, 44¾d.; N/Skipton, 44½d.; Boortkoi, 44d.; and in comebacks, Fingal Park/Skipton, 36d.

Brisbane.

The second series opened on the 14th December, the quantity catalogued representing some 30,000 bales. The selec-

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GIVES THE BEST RESULTS.

n included a few choice clips, but the great bulk of the erings comprised thin-stapled, badly-grown wools.

It was early apparent that a considerably lower level of lues had been established since the first series, but owing the great irregularity prevailing, it was difficult to quote. round figures, good to super fleece was from 20 per cent. 25 per cent. lower; medium, 25 per cent. to 30 per cent; erior and faulty sorts practically unsaleable. The leading ice in greasy was Gunn, 28½d.

Sales for the six months ending 31st December last were:—fered, 58,646 bales; sold, 30,476 bales; and it is understood ere are 100,000 bales in store.

Adelaide.

The December series witnessed rather more serious com- ition than in the earlier rounds, with the result that some 00 bales were disposed of out of the 10,000 offered, includ- g Tapio, at 27½d., and The Homestead/H/Tintinara, 26½d.

New Zealand Sales.

The second wool sale was held at Christchurch on 7th eember, when 6888 bales were submitted, but only a oderate proportion was sold. The demand was rather ener up to a point for fine wools than at e previous sale. Representatives of Home firms, ew Zealand mills and fellmongers were present in ce, but were in no sense keen buyers. The demand for ossbred wool was dull indeed. On the average best half- ed wools were up 1d. a lb. compared with November prices. reequarter-breds eased 1d. a lb., and coarse wools ½d. to d. a lb. Sales were afterwards made privately at advances e the passed in prices.

The Christchurch Woolbrokers' Association reports as fol- s regarding the range of prices at the sale:—

	d.	d.
Half-breds, supers	13	to 15½
(From par to ½d. up.)		
Medium half-breds	10½	to 12½
(From par up to 1½d. advance.)		
Inferior half-breds	9½	to 10
(From par to 1½d. advance.)		
The above wools were sold irregularly throughout.		
46's to 48's—		
Threequarter-breds	8	to 10½
(About last sales prices.)		
Medium threequarter-breds	6½	to 7¾
(At from par to 1½d. easier.)		
Inferior threequarter-breds	5	to 6
(At from par to 1½d. easier.)		
40's to 44's—		
Crossbreds	6½	to 7½
(From par to 1½d. drop.)		
Medium crossbreds	5½	to 6
(From par to 1½d. drop.)		
Inferior crossbreds	4	to 5
(From par to 1½d. drop.)		
58's to 64's—		
Merinos	16	to 18½
Medium Merinos	13	to 15
Inferior Merinos	11	to 12

Wellington.

The first wool sale was held at Wellington on 20th Decem- er, when there was a full bench of buyers, representing radford, Continental, and American houses. The Do- inion buying interests, including mills and fellmongers, ere well represented.

As the sale progressed it was patent that buyers only eally wanted finer wools. The prices offered for some of he coarser sorts were so low that the wool was passed in other cases there were no bids at all.

The following was the range of prices:—

Southdown, 11½d. to 13d.; halfbred, super, 12d. to 13¾d.; half- red, medium, 9d. to 11¾d.; halfbred, inferior, 7d. to 8½d.; cross- red, super, 10d. to 11d.; crossbred, fine, 8d. to 10½d.; crossbred, medium, 5½d. to 7½d.; crossbred, coarse, 3½d. to 5d.; crossbred, inferior to seedy, 3d. to 4d.; crossbred, bellies and pieces, 3d. to 4d.; halfbred pieces and bellies, 4d. to 6½d.; locks, 1d. to 2d.; crutchings, 3¼d. to 4d.; crutchings, seedy, 2d. to 2¾d.

AUSTRALIAN WOOL EXPORTS.

From 1st July to 31st December, 1920.

Compared with corresponding period last year.

State.	Season	1st July to 31st Dec.		Increase. Decrease.	
	1919-20.	1919.	1920.	Bales.	Bales.
New South Wales	703,456	299,466	248,956	—	50,500
Victoria	533,604	257,328	187,592	—	69,736
Queensland	353,964	141,694	127,440	—	14,254
South Australia	195,865	90,714	86,949	—	3,765
West Australia	160,550	55,525	41,112	—	14,413
Tasmania	30,247	9,721	3,605	—	6,116
	1,977,686	854,448	695,664	—	158,784
	Net Decrease, 158,784 bales.				

Considerable quantities of wool grown in some States are shipped from others, therefore the above figures do not show actual production of each State, but the total overseas shipments.

WOOL ARRIVALS AT SEABOARD IN AUSTRALIA.

From 1st July, 1920, to latest dates.

State.	Date.	Bales.	Bales.
New South Wales	23rd Dec.	—	470,624
Victoria	25th Dec.	—	258,297
Queensland	27th Nov.	—	—
Townsville	—	49,447	—
Rockhampton	—	20,811	—
Brisbane	—	96,432	—
South Australia	25th Dec.	—	166,690
Port Adelaide	—	105,119	—
Other ports	—	17,419	—
West Australia	4th Dec.	—	122,538
Fremantle and Albany	—	10,625	—
Geraldton	—	8,670	—
			19,295
			1,037,444

American Wool Market.

The report issued by the Sheep Division of the Canadian Department of Agriculture, under date 12th November, states:—

There is nothing of note to report in regard to wool movements. The market remains dull, and very little trading is being done except in the lower grade wools; these are only being purchased in small lots to meet immediate requirements of manufacturers. Dealers report a very poor season in amounts handled to date, with cancellations of orders a common occurrence. United States reports indicate that mills are still reducing their running time because of the very limited demand for goods.

Canadian mills have sufficient orders to keep them busy as yet, but some report that their orders will only keep them going until about the end of the year. Quotations on raw wools are unchanged.

At the recent Government sales held in Boston, 2,867,000 lbs. of wool were sold, being fully 95 per cent. of the offerings. The sale was essentially a carpet wool auction, and in view of the fact that the wools were two years old, 8½d., which was the top price paid, was considered sufficient for the quality of the wools. American quarter blood wools are quoted at 15d. to 16d., while the finer grades of Ohio and Michigan fleeces are quoted as high as 30d. Half blood combing is quoted at 25d. to 26d., and three-eighths blood combing at 19d. to 20d.

South African Wool Market.

The Union Produce Mart Limited, Durban, reports, under date 2nd December, 1920:—

At our sale held on 30th ult. we offered 399 bales of wool and mohair, of which 250 bales were sold. Competition was principally confined to well-grown skirted clips, which realised satisfactory prices, but irregular and short-stapled wools registered a further decline in values.

We catalogued some nice super combings, included in which was a splendid clip grown by Messrs. Jos. Smith and Sons, of Val, the fleeces fetching 17d., 16¼d., and bellies 9¾d. per lb. This wool showed good quality, had excellent length of staple, and was prepared for market in a very attractive manner. Other clips realised from 16¼d. to 12d. for Transvaals, and 16½d. to 13d. for Natal.

It is very noticeable that America is now competing freely with Britain and the Continent for these super wools, and their operations will be principally confined to this descrip-

tion, especially if an import duty is levied on foreign wools by the United States, as it is fully anticipated will be the case. It behoves our sheep farmers not to shear until the wool has super combing length, even if it takes thirteen to fourteen months to grow it this season, as they will be well rewarded by doing so. Another fact which must be borne in mind is that if South Africa is to compete successfully with Australia for these good combing wools, the clips must be well prepared for market.

"En passant," we notice that some of the well-known clips on our market are showing too much robustness, being too broad in the fibre, bordering on to crossbred qualities, and we would utter a note of warning to growers not to sacrifice the good spinning qualities of fine wool, as with the increased production of crossbred, fine wools will be in greater demand.

Our English Wool Letter.

(Specially written for "The Pastoral Review.")

LONDON, 25th November, 1920.

Prices Still Falling.

There is unfortunately nothing very encouraging to say about what has transpired in the wool manufacturing industry during the past month. Prices for partly and fully manufactured goods have continued to decline steadily throughout the whole period, and the question of finance still looms large in the minds of the majority. There is no doubt that much harm has been done by what has been termed over-trading, which is really an excessive increase of obligation to the banks, though it is questionable whether any other course could have been taken. Apart from the point whether it has been advisable to indulge in this over-trading or not, it is a fact that nine out of every ten have done it, and practically all firms are in the same boat to-day. Those who have been able to steer clear of anything like financial disaster have real reason for self-congratulation, particularly in view of the fact that bad as the position is to-day it cannot continue to be so indefinitely. Sooner or later there will be a turn in the tide, and firms who have so husbanded their resources as to be ready with even a decent amount of capital will ultimately reap the reward of their present caution. Meanwhile, as already stated, values are moving unmistakably in a downward direction. The following table will illustrate better than any description of the market how top values have fallen during the past month:—

Tops.	Oct. 21, 1920.	Nov. 18, 1920.	Tops.	Oct. 21, Nov. 18, 1920.	1920.
	d.	d.		d.	d.
80's	115	100	70's warp	84	81
70's av.	78	72	64's av.	66	60
64's warp	72	66	60's ord.	59	54
60's super	62	57	56's av.	50	45
56's	53	48	50's	42	36
50's	45	40	46's c.	26	23
48's c.	32	28	48's p.	32	28
40's c.	22	20	40's p.	22	20
46's p.	26	24	32's p.	21	19
36's p.	21	19			

Course of London Sales.

What is officially described as the "R" series of London sales has just closed, and the results cannot be regarded as eminently satisfactory, though they are quite in harmony with the growing feeling entertained in Bradford trade circles that new business can only be done on a lower scale of values. Some very decent wools have been offered, though the Merinos available were not the best that Australia can produce, and the quantity was also limited. There were, however, some decent clips, and these commanded the best competition of the series, owners apparently being prepared to sell at fair prices. With regard to Merinos an outstanding feature has been the high Government limits, good Melbourne and Geelong 70's being limited at about 92d. and

good clean New England 70's up to 96d. Superior West Australian 64's-70's shafty wools have been limited at 75d., and Tasmanian pieces and bellies, mostly clothing wools, at about 73d. clean. So far as the short combing wools are concerned the high reserve prices would appear to have been justified by Continental competition, one or two buyers being prepared to pay them in spite of the adverse rate of exchange, but the quantity taken has not been large, operations no doubt being confined to actual needs. The longer wools, however, in which Bradford is interested have frequently suffered in consequence of these high reserve prices. Probably a moderate weight has gone to America, but the total quantity can only have been small compared with the weight withdrawn, as West Riding firms were only prepared to pay prices pence per lb. in the grease less than the reserves. The quantity of short West Australian wool offered has been fairly large, and though wasty and tender, was sold at prices ranging from 21d. to 29d. Little wool showing any length or style was obtainable under 63d. clean. On one or two occasions Continental users took a fair quantity of short and tender 70's Queensland broken necks and pieces, and some shabby short West Australian 64's were also sold at around 17d. in the grease. During the second week of the sales Continental buyers showed rather more interest, and besides the short Queensland wools also took fine New Zealand Merinos. The quantity of fine Australian crossbreds offered was large, some surprise being caused by the further reduction of Government limits. Low and medium greasy lots sold very slowly, whole pages of the catalogues being passed over without an actual bid being given. Only a limited quantity of scoured wool from Australia was available, one lot of Victorian 60's realising 53d.

Clean Scoured Costs.

Mr. Lewis Fordham, the well-known London woolbroker, has issued his usual estimate of the clean scoured cost of various qualities of Government wool sold in London during the past series. The particulars are as follows:—

Quality.	Clean Scoured Basis for Clothing and Spinners' Stylish Free Wool.		Clean Scoured Basis Combing Wools. Topmakers' Selection		Clean Scoured Basis. Lambs' Wools. Free. Burry.		Carbonised Basis for Short, Faulty Wool.
	d.	d.	d.	d.	d.	d.	
80's	90	89	86	—	—	—	—
70's	93	75	81	56	62	52	62
64's	77	55	63	52	42	40	42
60's	59	48	52	42	38	38	40
58's	42	37	50	39	37	37	38
56's	36	33	40	34	37	37	37
50's	28	26	36	28	35	35	35
46's	20	19	28	25	26	26	26
44's	19	18	27	23	23	23	23
40's	17	16	25	22	20	20	20
36's	16	15	23	21	18	18	18

The Question of Government Limits.

No question has so seriously engaged the attention of the wool trade during the past two months as that of Government reserves on colonial wool. The Ministry of Munitions has frequently considered the problem, but not until last week was it seen fit to lower limits on Merinos. It was apparent both at the August and September series of sales that the department were prepared to accept less money than earlier in the year. Still after the fall in the price of tops in Bradford all Government reserves have remained too high for the majority, and after the recent experiences in London, Australia, New Zealand, and South Africa, the department must be convinced that the time has arrived when a revision must take place in the price of all qualities from 36's to 80's. It is understood that Sir Arthur Goldfinch has held the view that there was nothing to be gained by forcing wool on to an unwilling market. Some are of opinion that no good purpose would have been served if limits had been reduced three months ago, and even to-day the opinion is entertained in some quarters that a lowering of values will not bring out new business for pieces. Manufacturers in Bradford and Huddersfield have recently emphasised that it is not a question of price. If they quoted 10s. per yard

Australian Wool Shipments.

Table showing the quantity of Wool afloat for all oversea ports.

Ship.	Destination.	Date of Departure from last Aust. Port of Calling.	Shipped from--						Arrived at Port of Destination.		Afloat. Bales.
			N.S.W. Bales.	Vict. Bales.	Q'land. Bales.	S. Aust. Bales.	W. Aust. Bales.	Tas. Bales.	Date.	Bales.	
Ariosto	London and Continent	Oct. 7, 1920	..	..	..	2,000	13,890	..	Dec. 30	15,890	..
Australport	London	" 12 "	..	..	..	..	6,106	..	" 30	6,106	..
West Camargo	San Francisco	" 20 "	134	..	..	..	..	..	" 1	134	..
Shropshire	Liverpool	" 20 "	4,314	..	..	..	..	..	" 1	..	4,314
Tropic	London and Continent	" 22 "	600	..	..	1,184	..	..	Dec. 24	1,784	..
Bakara	United Kingdom	" 23 "	..	4,489	..	..	..	..	" 19	4,489	..
Boonah	U.K. and Continent	" 23 "	..	..	..	737	..	..	" 19	737	..
Araluen	London and Continent	" 25 "	..	10,088	..	..	..	..	" 19	..	10,088
Canadian Inventor	Vancouver	" 28 "	594	165	..	..	..	..	" ..	..	759
Hellenic	Antwerp	" 29 "	379	25	..	783	..	..	" ..	..	1,187
Persic	United Kingdom	" 30 "	3,577	2,681	2,378	1,047	..	..	Dec. 18	9,683	..
City of Corinth	"	" 30 "	2,547	6,143	..	..	..	..	" 26	8,690	..
Canastota	New York	" 31 "	2,155	..	..	100	..	..	" ..	..	2,255
Port Pirie	United Kingdom	Nov. 1 "	1,980	5,694	..	..	..	..	Dec. 27	7,674	..
Canadian Exporter	Vancouver	" 6 "	..	86	..	..	..	..	" ..	..	86
Knight Companion	London	" 6 "	..	6,637	..	5,547	..	..	" ..	..	12,184
Port Elliott	United Kingdom	" 6 "	7,679	..	337	..	..	..	Dec. 27	8,016	..
Suffolk	Boston and New York	" 6 "	1,406	5,086	..	..	..	..	" ..	..	6,492
Banffshire	London	" 9 "	3,251	2,807	..	8,107	..	..	Dec. 27	14,165	..
Demosthenes	"	" 14 "	310	5,444	..	..	..	..	" 27	5,754	..
Marken	Continent	" 17 "	49	364	..	105	..	..	" ..	..	518
Ascanius	United Kingdom	" 19 "	5,855	3,193	..	2,279	..	..	" ..	..	11,327
Konigin Luise	London	" 19 "	2,642	..	..	4,283	..	..	Dec. 26	6,925	..
Runic	United Kingdom	" 19 "	4,188	4,287	..	9,142	..	..	" ..	..	17,617
Elmoren	Continent	" 20 "	4,101	1,063	..	..	..	..	Dec. 26	5,164	..
Barambah	United Kingdom	" 21 "	1,268	6,062	..	..	..	..	" ..	..	7,330
Liberty	New York	" 22 "	..	1,480	..	..	..	..	" ..	..	1,480
Osterley	London	" 23 "	1,152	500	..	..	..	..	Dec. 26	1,652	..
Malwa	"	" 27 "	..	..	..	695	..	..	Jan. 1	695	..
Arnaldo De Brescia	Continent	" 30 "	10,147	334	..	101	..	..	" ..	..	10,582
Berwickshire	London	Dec. 1 "	..	256	..	..	..	..	" ..	..	256
Surrey	United Kingdom	" 1 "	414	..	4,698	..	..	..	" ..	..	5,112
Tahiti	Vancouver	" 1 "	152	..	..	..	..	..	Dec. 20	152	..
Port Chalmers	United Kingdom	" 2 "	400	..	7,697	..	..	..	" ..	..	8,097
Port Napier	London	" 2 "	9,859	..	..	..	..	..	" ..	..	9,859
Ayrshire	"	" 3 "	2,195	..	..	..	..	..	" ..	..	2,195
Calula	U.K. and Continent	" 3 "	1,102	1,648	..	..	126	..	" ..	..	2,876
Ulysses	United Kingdom	" 3 "	..	3,484	4,421	1,688	..	..	" ..	..	9,593
Iceland	New York	" 7 "	..	734	2,741	..	..	..	" ..	..	3,475
Carpentaria	United Kingdom	" 9 "	2,721	..	526	..	..	..	" ..	..	3,247
Upada	Madras	" 9 "	..	..	..	94	..	..	" ..	..	94
Clan Monro	Continent	" 10 "	..	..	..	1,084	..	..	" ..	..	1,084
Mantua	London	" 10 "	187	606	..	510	..	..	" ..	..	1,303
Warfield	Continent	" 10 "	..	3,039	9,449	5,146	..	..	" ..	..	17,634
Berrima	London	" 14 "	..	1,025	..	1,340	..	..	" ..	..	2,365
Euripides	"	" 15 "	3,016	1,714	4,544	..	..	..	" ..	..	9,271
Minderoo	Singapore	" 19 "	..	..	..	..	3,085	..	" ..	..	3,085
Orontes	London	" 22 "	591	244	1,175	..	..	..	" ..	..	2,010
Sonoma	San Francisco	" 22 "	2,463	..	..	..	..	..	" ..	..	2,463
Moncaliere	Continent	" 23 "	4,950	7,405	..	1,302	..	..	" ..	..	13,657
City of Edinburgh	United Kingdom	" 24 "	..	2,452	..	11,622	..	..	" ..	..	14,074
Palma	London and Continent	" 24 "	98	..	13,536	..	..	..	" ..	..	13,634
Aki Maru	Yokohama	" 31 "	..	1,496	..	..	..	..	" ..	..	1,496
Dongarra	London and Continent	" 31 "	1,173	809	3,187	..	..	..	" ..	..	5,169
Soerakarta	Rotterdam	" 31 "	766	277	6,434	864	..	..	" ..	..	8,341
Totals										97,710	226,612

for 18 to 19 oz. blue serges they could not sell, wholesale houses not being willing to buy at any price. Notwithstanding manufacturers are prepared to offer standard goods for next spring delivery at values in harmony with to-day's cost of wool, new business is not forthcoming. In face of this some are convinced that lower wool values will not stimulate trade. With regard to the reduction of limits the Government authorities have apparently had in mind the interests of our colonies, and it is understood that the view held by Sir Arthur Goldfinch has been that the British Government should not compete with Australian growers in the marketing of their new clip wools. Certainly the Ministry of Munitions cannot now be charged with helping to slaughter prices. When prices at colonial sales declined a further 15 to 25 per cent. the department rightly lowered their limits, but there is general agreement that values in the colonies are still below a parity with London. There are importing top-makers in Bradford who frankly say that good warp 64's tops can be made out of Australian-bought wool at 4s. 6d. to 4s. 9d., but no Merinos were sold in Coleman-street last week to produce 64's at even 6s. There is, therefore, very good reason for saying that the attitude displayed by the Government was right.

An Unsatisfactory Manufacturing Outlook.

Practically all West Riding worsted and woollen spinning mills are only working twenty-four to thirty hours per week,

and if trade does not improve during the next fortnight many mills will begin to work only two and three days per week, 9 a.m. to 5 p.m. being the hours worked. It is no exaggeration to say that the outlook for trade is extremely depressing. There has been a distinct retrogressive move during the past three or four weeks, there being few signs anywhere that relief is forthcoming. It may be emphasised, however, that the possibility of buying cheaper wool should help to stimulate trade and to impress upon the wholesale fabric buyer and the general public that manufacturers are in great earnest in their desire to bring down the cost of clothing to a reasonable level.

The point about which growers will naturally be most concerned is whether they will be able to continue to produce wool profitably. Obviously they are not engaged in pastoral pursuits for the fun of the thing, and the drastic declines which have taken place at recent sales in the colonies suggest that some wools are coming down to a level which is near the minimum margin of a reasonable profit. The same thing applies to South America and South Africa, and many of those engaged in the trade here are looking with some concern upon the low level which values have now touched. They recognise that values cannot continue to decline as they have done without growers suffering seriously, and some have not hesitated to express it as their view that the present downward tendency of values will ultimately react upon pro-

duction, making the world's output of raw material smaller than it is to-day. This, however, is not one of the possibilities of the immediate future, and when all is said and done, one cannot do more than face the problems of the present, and these are serious enough from a manufacturing point of view.

Present and Pre-war Prices Compared.

In order further to illustrate the decline which has taken place in the clean scoured cost of the raw material, we give below a table compiled from information supplied by Messrs. Kreglinger and Fernau, another well-known firm of London woolbrokers. It will be seen that an estimate of prices at the close of the last London sales is given in comparison with those current for corresponding qualities in July 1914:—

Description.	July, 1914.	March 26, 1920.	Nov. 1920.
	per lb. d.	per lb. d.	per lb. d.
Combing.			
70's superior fleeces	32	160/165	90/80
64/67's good medium fleeces ..	30½	150/155	65
60/64's " " " " " " " "	30	135	55
64's " " pieces " " " " " "	28	130	57
60's " " " " " " " "	27	120	48
58/60's good medium fleeces ..	29	110	46*
56's fine crossbred fleeces ..	26	86	36*
50-56's " " " " " " " "	23½	72	30*
46/50's crossbred fleeces ..	18	50	22*
46's " " " " " " " "	17	38	—
44's " " " " " " " "	16	32	—
36/40's " " " " " " " "	15½	27	—
Carbonising—			
66/64's good carbonising pieces ..	26	90	32/36
60/64's carbonising pieces and bellies ..	25	75	28/30
60's average locks ..	20	55	25/30
64's average lambs ..	22	58	—

* Nominal.

Wool Realisation Scheme.

Accepted by the British Government.

As we go to press, we learn that the Prime Minister and Sir John Higgins (chairman of the Central Wool Committee) have received official cable messages from the British Ministry intimating their approval of the proposal recently put before them, and outlined in our last issue, for the control and sale of the carry-over wool.

Mr. Hughes (Prime Minister) stated that before giving a definite answer the British Ministry had asked that the Commonwealth Ministry should give certain assurances safeguarding the manufacturers and consumers of Great Britain against exploitation. In reply, the Commonwealth Ministry had given its assurance that in the formation of the British-Australian Wool Realisation Association, the title by which the new association will be known, there was only one objective—that was to stabilise the British Empire wool industries. Thereupon the British Ministry had given the formation of the association its approval.

Goldsbrough, Mort and Co. Limited.

Statutory Meeting.

Mr. J. M. Niall, when addressing the statutory meeting of shareholders of Goldsbrough, Mort and Co. Limited last month, confined his remarks mainly to the new scheme of control for carry-over wool, which was dealt with fully in last issue. The pastoral position, he said, had improved considerably as the result of timely rains. On the other hand the financial position generally was adversely affected by the limited wool realisations, and the company had to bear its share. Outgoings were heavy, and there was comparatively little coming in. The cash position therefore was serious. Wool which in the past was always regarded as being the equivalent of actual cash (for the simple reason that it could be converted as readily, if not more so, than any other commodity), had for the time being lost its buoyancy.

The payment of an interim dividend at the rate of 10 per cent. per annum for the half-year ended 30th September was approved and the retiring directors (Messrs. J. A. M. Elder and K. M. Niall) were re-elected.

American Tariff.

Proposed New Rates.

A cable from Washington, U.S.A., dated 20th December, advises that the Ways and Means Committee of House of Representatives recommends the following duties be charged on imported primary products:—Wheat, 1s. 3d. per bushel; wool (greasy), 7½d. per lb.; do. (scoured), 10d. per lb.; mutton and lamb, 1½d. per lb.; cattle, 30 per cent. ad valorem; flour, 20 per cent. ad valorem; maize, 7½d. per bushel; sheep, 4s. 2d. per head.

It is further reported that these rates have been embodied in a bill which has been presented to Congress. No advice as to the proposed tariff has been received by the office of the American consul in Melbourne, and the above statements need not be taken as final in any sense. It is recognised that the Republican administration, which comes into power in March, will impose protective duties on primary products, but to what extent has to be decided by both the House of Representatives and Congress. Under the circumstances, nothing definite is likely to be done until March at the earliest. At present most, if not all, the articles mentioned are admitted free. A heavy duty on wool and frozen meat would naturally affect the buying of those lines on American account in Australia and New Zealand. Seeing that Australia has imposed heavy duties on goods from the States we can hardly complain on that score.

A Champion Sheep Dog.

The sheep dog illustrated on our cover this month is Wampy, by The Gaffer, ex Maid of Oxton (imp.), and is the winner of trophies and prize money to the value of £336. He has made his name a household one, and no dog is better known in the sheep dog world. His sire The Gaffer was probably the greatest dog of his day, and his dam Maid of Oxton (imp.) stands out pre-eminently as a breeder. She was bred in Scotland by T. P. Brown, Esq., and since she was imported has won trials in New Zealand and Tasmania. Wampy is owned by Mr. James L. Moore, of the Tasmanian Kennels, Westbury, Tasmania.

During the three years that Wampy has been working he has won the following trials, besides trophies, &c.:—

1917.—1st Sydney Novice, then aged 11 months; 1st Puppy Stakes, Burra, South Australia; 1st Open Trial, Mt. Bryan, South Australia.

1918.—1st South Australian Championship; 1st Open Trial, Mt. Bryan, South Australia; 1st Royal Trial, Melbourne; 1st Open Trial, Bendigo, Victoria.

1919.—1st Open Trial, Maldon, Victoria; 1st Sydney Open N.S.W. Championship; 1st Sydney Special; 1st Euroa Open Trial; 1st Open Trial, Mt. Bryan, South Australia; 1st Royal Trial, Melbourne; 1st Bendigo Open Trial; 1st Tasmanian Championship.

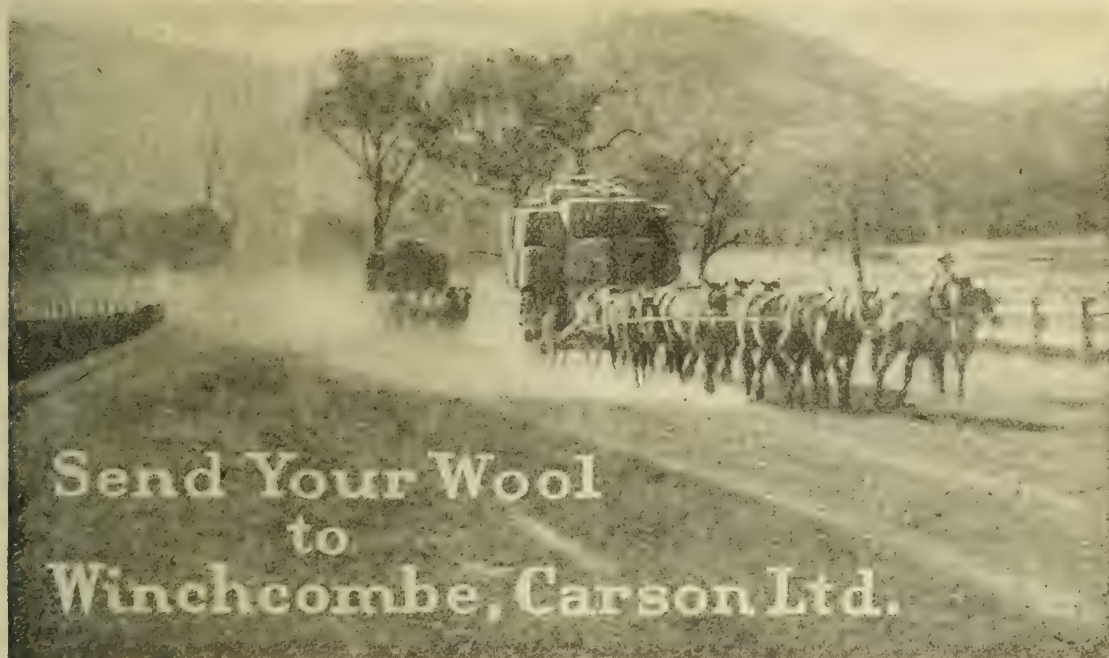
1920.—1st Open Trial, Maldon, Victoria; 1st Open Trial, Casterton, Victoria; 1st Victorian Championship; 1st Nhill, Victoria.

Both the sire and dam of Wampy are also in Mr. Moore's kennels.

New Cure for Tuberculosis in Cattle.

The Paris "Petit Journal" states that as a result of three years' research work Dr. L. C. A. Calmette, sub-director of the Pasteur Institute, Paris, and Professor Guérin have produced a new serum, experiments with which enable them to state definitely that tuberculosis in cattle can be conquered.

The professors are now experimenting with anthropoids to ascertain whether or not the serum is efficacious on human beings.



Send Your Wool
to
Winchcombe, Carson Ltd.

Sydney OR Brisbane.

SALT LICK £9 ton

(Put back into the original Salt Bags after mixing).

Never made in block form, which tends to spread disease from one animal to another.

A properly proportioned, machine-mixed, Sulphur, Bonemeal, &c., &c., Lick, medicated to suit the requirements of each particular season, is available at a low price, so that it can be fed to your whole flock generally. It is of no use to protect 10 per cent. only and neglect the remainder. At £9 ton it enables the whole flock to be properly salted down. Every effort has been made to keep the prices within the reach of large and small sheep owners alike, hence even the saving that has been effected in the bags (see note below).

This Lick won't prevent the Blow Fly trouble, but it will, by its internal effect render sheep much less liable to attack. Naturally the internal condition effects the urine and other fly attractors.

At £9 ton it is approx. 30% cheaper to use than the rough Crude Sheep Salt, as it goes very much further in use owing to being heavily Medicated, which naturally increases the nourishment imparted to the stock. Stock do not require as much Medicated Lick as they do plain salt as their craving is satisfied more quickly and effectively.

Remember that the **Rail Freight on Salt is from £2 to £3 ton** itself now on an average distance of about 300 miles.

31 tons were sent in one week to one user alone, at Armidale, in November.

The Genuine—H. C. CARTER'S—Original MEDICATED SALT LICK.

A COMPARISON IN COSTS.

CRUDE SALT	2½ tons at £4/10/- ton	...	...	£10 2 6
	Rail Freight on above 300 miles	£2 4/-	...	4 19 0
	Cartage at buyer's end 5/- ton	...	...	0 10 0
				£15 11 6
FINE GRAIN COARSE SALT	2 tons at £5 10/- ton	...	...	11 0 0
	Rail Freight	...	...	4 8 0
	Cartage	...	...	0 10 0
				£15 18 0
MEDICATED LICK	1 ton at £9 ton	...	...	£9 0 0
	Rail Freight	...	...	2 4 0
	Cartage	...	...	0 5 0
				£11 9 0

NOTE.—It costs 20/- ton extra to supply in the special quality new salt lick bags. Why not save the cost? The quality is all the same, whichever bag it is in. At £9 ton, the Lick is put back in the original Salt Bags after mixing.

F. W. WILLIAMS & Co. Ltd.,
Merchants and Station Suppliers,
41 Hunter Street, Sydney, and
197 King Street, Melbourne.

BOWEN MEAT WORKS

BERGL AUSTRALIA LIMITED

Proprietors

Situated on the Railway Line at Merinda, six miles from Bowen Wharves.

Buyers at "per head" or "by weight" of **FAT CATTLE** suitable for the Meat Export Trade.
Producers and Exporters of **MEAT WORKS PRODUCTS**, including **Frozen Meat, Canned Meats, Extract of Beef, Tallow, Fats, Oils, Hides, Manures, &c., &c.**

**Live Stock, Insurance, Shipping and General Commission Agents,
Meat and Produce Brokers.**

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BRANDS:—**



AND



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**THE
USE
OF**

PURITAS DIP

**ENSURES
MORE MEAT
MORE WOOL**

**Puritas Disinfectants
Co. Ltd., Leicester.**

**Agents for Victoria, N.S.W., Queensland—
T. S. BEAUMONT & SON, Wool Brokers,
478 Collins-st., Melbourne.**

**Agents for South Australia—
LAUGHTON & COOMBS LTD., Wool Brokers,
Currie-st., Adelaide.**

**Agents for New Zealand—
H. DAWSON & CO., Wool Brokers,
Dunedin.**

**The Gladstone Meat Works of
Queensland Ltd., Gladstone,
Queensland.**
BUYERS OF FAT STOCK FOR EXPORT.

Meat and Produce Trades.

Beef Freezing Research.

Our London correspondent, Mr. Joseph Raymond, sends the following notes on the scientific experiments that are being conducted in Great Britain in connection with the preservation of beef by refrigeration. It may be explained at the inception of the Food Investigation Board was due to the instigation of Mr. Raymond. The idea took form when he introduced a deputation to Sir William McCormick in June 1917. He and the Director of Food Investigation, Mr. W. B. Hardy, are in close touch over these experiments. The members of the Meat Preservation Committee are Mr. W. B. Hardy, chairman, Professor W. M. Bayliss, Professor G. Hopkins, Messrs. W. G. Howarth, Harold Nelson, J. Ward, with Mr. L. F. Newman as secretary.

Mr. Raymond's suggestion that the Food Investigation Board and the Commonwealth Government should act in conjunction in the matter of frozen meat research is an excellent one. Something on the lines proposed should be productive of important results.

Mr. Raymond writes:—

"As was recorded in the October number of *The Review*, the Food Investigation Board of the new Scientific and Industrial Research Department of the Government in London has been active through its Meat Sub-committee in investigating the scientific problems connected with the freezing of beef. The news hitherto communicated has not mentioned the lines on which the experiments were conducted, so that I may give a few more particulars in this connection.

"I may say that this Government research is going forward in a very promising manner, and several of the best scientific brains of Europe are at present engaged in pursuing the investigations, under the guidance of a committee which so fortunately includes several practical members of the frozen meat trade. The researches, apart from the microscopic and bacteriological work, have been first of all addressed towards ascertaining the effect of very rapid freezing, and experiments on a small scale, that is to say, with pieces of a few pounds in weight, showed that when beef is frozen sufficiently rapidly, e.g., by immersion in brine cooled to 20 degrees C., the characteristic propensity to drip on thawing was eliminated. Attempts were made to reproduce these results on a commercial scale by using quarters of beef, but the plant at the disposal of the workers was not powerful enough to remove the heat sufficiently rapidly. It was noticed in the course of these experiments that immersion in brine led to the natural fresh red colour of the beef deteriorating rapidly when it was thawed. The samples usually appeared a dull and rather dirty purple. It may be said that the freezing of beef so that the product on thawing behaves chemically and physically like fresh beef and retains its natural colour is possible. It remains to be seen, however, whether it is feasible as a commercial process. The Board have made arrangements for carrying out the necessary experiments on a commercial scale.

"The Food Investigation Board has a fair prospect of continuing these experiments on a practical scale before long, as the funds have now been obtained for erecting a refrigerating station on University ground at Cambridge, and at this new centre there will be conducted a great amount of scientific work which will no doubt be of great importance to the frozen meat trade in the future. The Food Investigation Board, of course, is aware that Government scientific investigation is also going forward in the Commonwealth, and I believe I am right in saying that the scientific authorities here look forward to the time when they can take joint action with the Commonwealth Scientific Board in frozen meat research. I do not know whether the Commonwealth Department has yet entered upon frozen meat research, but when it does the importance of co-ordination should not be lost sight of. The Commonwealth Government has in its Veterinary Officer in London, Mr. C. Cummins Cherry, an official of scientific attainments who could no doubt act in the capacity of liaison officer when the moment is ripe for his development."

Position and Prospects in Australia.

The Season.

The heavy rains recorded during the month over the pastoral districts of southern Australia will not be viewed altogether as an unmixed blessing. A downpour at this time of the year is apt to spoil the old grass, while new growth started is liable to be scorched by a hot sun. On the other hand, the green feed is appreciated by stock, and also lessens the risk of fires, so no doubt the falls can be put on the credit side of the ledger. This is certainly the case in New South Wales, where efforts are being made to obtain a summer lambing to make up some of the losses due to the drought. A green picking is essential for lambing ewes, and that is now practically assured.

Speaking on this subject recently, Mr. R. M. Pitt, managing director of Pitt, Son and Badger Ltd., and a recognised authority on stock matters, said: "We can expect a record double lambing in New South Wales. Not only will the ewes rear the summer lambs, but will be in great condition for the autumn and winter lambing. I expect to see this year's lambing, where double lambing has been gone in for, to work out at 80 to 100 per cent. In my estimation the number of sheep in the State at the end of the drought was only about 25,000,000 to 26,000,000. Assuming that we get 12 to 14 million lambs, and after allowing for local consumption, &c., there should be from 33 to 35 million sheep in New South Wales at the end of the winter." It depends on how the winter shapes, of course, but that is what Mr. Pitt expects to see if conditions continue favourable.

Queensland, and the north generally, is having a normal season. There has been a fair amount of rain, and stock are in good condition.

Current Operations.

The lamb and mutton season has pretty well petered out, only one or two, if any, of the meat works in the southern States having done any killing for export since the beginning of the year. What with the competitive buying by graziers keeping the markets high, and the uncertainty as regards wool and skin values, exporters find it advisable to hold off for the time being. Whether they will be able to operate later depends largely on the season. A hot, dry spell, or bad grass fires, might force increased numbers of stock on the markets, and cause a temporary glut. Likewise, financial considerations may bring about heavier marketings and a drop in values. It is quite possible that many who have been unable to realise on their wool may be obliged to sell sheep, but whatever happens there is not likely to be any considerable surplus available for export for the next few months.

Probably the total killings of lambs at the different works to date have not exceeded 400,000 head, to which can be added a few thousand sheep. It has been an unsatisfactory season, which, in view of the understocked state of the country, is not surprising, or from a national point of view altogether regrettable.

The beef season in Queensland opens the end of this month. Most of the companies operating in the south and central districts have their buyers out, and some fair lines of bullocks have been secured. The Gladstone works, which are expected to be the first to start killing, open about the 20th instant. Lake's Creek and other works on the Brisbane River hope to commence operations the end of January, or early in February. It is not likely a start will be made in the north much before April. The companies are understood to be paying less for cattle this year than last, when they were giving about 42s. per 100 lbs. Considering tallow is 50 per cent. lower, and hides, which at the opening of last season were selling up to 28d. per lb., cannot now be sold for much over 8d., this is hardly to be wondered at. So far nothing is known as to the Government's intentions regarding the commandeering for the State butchers' shops. Naturally, until the price and quantity are fixed, exporters must be operating very much in the dark. Given reasonable freedom from labour troubles, the probability is that there will be a large increase, up to 50 per cent., in the beef output during 1921 as compared with 1920. Last season

approximately 250,000 head of cattle were treated, this season may well run to 400,000 head.

The clearances of frozen meat from the Commonwealth to all oversea ports during December totalled 19,388 carcasses mutton, 157,131 carcasses lamb, and 62,386 quarters beef, of which all but 2500 sheep and lamb, and 3400 quarters beef, were consigned to ports in Great Britain. Some heavy shipments of beef will be made from Queensland this month. No doubt fair parcels of lamb will also be despatched from the southern States, particularly Victoria, where there were 100,000 carcasses in store at the beginning of the year. There is ample freight available.

Six Months' Exports.

The following table shows the exports of frozen meat from the different States of the Commonwealth to Great Britain during the last six months, as compared with shipments for the corresponding period of 1919:—

	Mutton.		Lamb.		Beef.	
	1919.	1920.	1919.	1920.	1919.	1920.
	crs.	crs.	crs.	crs.	qrs.	qrs.
N.S.W.	375,667	83,219	198,799	30,327	277	731
Victoria	1,302,411	317,133	1,065,641	271,710	5,358	10,971
Queensland	118,205	793	1,110	—	608,269	373,936
South Australia ..	203,793	77,490	58,173	12,021	1,554	634
West Australia ..	—	—	—	—	4,355	15,308
	2,000,076	478,635	1,323,723	314,058	619,813	401,574

Roughly, the mutton and lamb exports were 25 per cent. and beef about 65 per cent. of those for July-December 1919. In the two former cases the decrease must be attributed entirely to seasonal conditions. The heavy losses of stock due to the drought early in 1920 were naturally reflected in the exports later in the year. As a matter of fact, all the mutton and lamb shipped in the last six months, with the exception of less than 200,000 carcasses, went into store prior to July, and belongs to the preceding season. As regards beef, drought conditions in the south of Queensland explain part of the falling off, and labour troubles throughout that State account for the balance. Strikes on the water front and at the works interfered with killings to such an extent that considerable numbers of cattle that could have been turned into beef were left in the country. Shipments have also been delayed, there being at the beginning of this month probably over 100,000 quarters of last year's meat waiting clearance.

Tables published elsewhere show that there has been a considerable increase in exports from New Zealand and South America during the half year just completed, as compared with the figures for the corresponding period of 1919. The totals are:—

	Mutton.		Lamb.		Beef.	
	1919.	1920.	1919.	1920.	1919.	1920.
	crs.	crs.	crs.	crs.	qrs.	qrs.
New Zealand	2,570,478	3,609,393	1,856,052	2,831,152	302,189	415,648
South America	681,843	918,000	99,195	280,000	2,438,878	2,521,900

The New Zealand figures for the last half year include 474,791 carcasses mutton, 1,909,222 carcasses lamb, and 593 quarters beef shipped to North American ports. The fact that an aggregate of very nearly six and a-half million carcasses mutton and lamb, and over 400,000 quarters of beef were cleared from the Dominion in the six months evidences the strenuous efforts made by the British Board of Trade to move the meat.

Queensland Affairs.

The Queensland Government has remitted to the meat companies the balance of the £100,000 agreed upon between them as payment for the meat taken for the State shops in excess of the total allowed for under the agreement in 1918-19. The Government had previously paid the first £50,000. The total was a compromise. Some of the companies desired £169,500; others fixed the total at about £140,000. However, it was arranged for the companies to take £100,000, but they obtained a promise from the Government that in the 1920 contract it would sell its own cattle to the State shops, and not have them treated for export, and also arranged other favourable conditions. The amount has been taken from the accumulated profits or reserves of the State butchers' shops or State stations.

It is understood that a claim for the full £100,000 has been made by the State on the Imperial authorities, although on what grounds it is difficult to see.

In his report on State enterprises, the Commissioner for Trade, Mr. W. H. Austin, shows that the State butchers' shops made a profit of £36,652, and the cattle stations £25,661 for the year ended 30th June, 1920. It appears that the beef acquired from the meat works, including storage, is costing the department 4½d. a lb., and is being sold at a profit of approximately ½d. per lb. The Auditor-General, Mr. M. H. Robertson, in a supplementary report, says that it is apparent the profit of £25,661 shown on the State stations was arrived at through an inflation of the values of the cattle. On comparing the values adopted with those placed on cattle of similar age the previous year, the inspector found they had, in some instances, been materially appreciated. In the case of three stations the increases were £17,000, £13,000, and £10,000 respectively!

It will be remarkable if the butchers' shops are able to show such big profits this year, as for over a month those in Townsville have been closed by a strike, with the result that 207 lbs. of meat have gone bad. It is the usual Townsville strike. A man has been dismissed for some cause or other, and all the other hands refuse to work until he is reinstated.

In furtherance of its policy to squeeze the cattle owners of Queensland the Government last month issued a proclamation fixing the maximum price at which beef could be sold in Brisbane and suburbs. Fillet steak is fixed at 1s. 1d.; rump steak, 11d.; sirloin, 10d.; rib roast, 8d.; corned beef round, 9d.; suet, 9d. per lb.; and so on. Many of the prices are 1d. per lb. below those ruling in the shops at the time, and can only have the effect of reducing the value of cattle on the hoof. The butcher is allowed to add 1d. per lb. for delivery.

The Bullock Process of Meat Preservation.

A bill has been passed by the New South Wales Parliament which will enable the above process to be put into practical operation if the health authorities can be satisfied it is not harmful to human life. Briefly, the system comprises the permeation of whole carcasses of meat with sulphur dioxide in small quantities, but in excess of that allowed under the existing Health Act. Mr. Wearne, in introducing the bill, explained that the carcasses are placed in a hermetically sealed chamber, and by the use of an explosive a gas is created which forces the preservative right through the meat into the marrow inside the bones. If the health authorities can be satisfied by further tests the Act can be made operative by proclamation in the "Government Gazette."

The inventor of the process has for some time proved to his own and other people's satisfaction that the quantity of sulphur dioxide used is not harmful. A company is working a plant at Orange, N.S.W., where a considerable quantity of foodstuffs have been treated and kept for a considerable period. It is claimed that under the system it will be possible to kill stock in the country and market the carcasses at Sydney without the use of refrigeration.

Sydney Meat Prices.

The New South Wales Government have decided to drop the inquiry into the price of meat in Sydney. The whole thing was a needless expense to the State and cause of irritation to all called on to give evidence. Judge Rolin, chairman of the Necessary Commodities Commission, in his judgment, says:—"It is plain that the butcher is not a profiteer. At the time meat was at its highest the butcher was actually working at a loss." Early in the inquiry the Crown announced that there would be no interference with the price of stock on the hoof.

Certain of the rural associations in Argentina are investigating charges against American packing houses of unfair dealings with Argentine cattle growers. If the investigation should show that any basis exists for these charges, Congress will be asked to pass anti-trust legislation especially designed to curb the operations complained of. The specific accusation is to the effect that the packers have entered into unfair combinations to keep down the price of live cattle while keeping up the price of dressed meats, thus assuring to themselves profits as high as 22½ per cent. per annum. Similar charges were frequent during the war, and several unsuccessful efforts were then made to get the matter before Congress. The recent publication of balance-sheets for 1919 led to a renewal of the agitation.

Position and Prospects in New Zealand.

(FROM OUR OWN CORRESPONDENT.)

CHRISTCHURCH, 1st January, 1921.

Settlement of the Freezing Works Dispute.

Just before the mail closes news comes to hand from Wellington that the freezing works dispute has been settled, an agreement having been made between the Federation of Freezing Works Employees and the freezing companies, on the basis of payment of a bonus of 25 per cent. to hourly and weekly workers and a bonus of 20 per cent. to pieceworkers, on the 1919 award rate on all time, including overtime. The bonus is to be retrospective as from 1st November last.

The employees demanded 25 per cent. increase all round, and the companies offered 20 per cent. increase on piecework rates and 22½ per cent. on time rates. The agreement entered into thus provides that the time workers get 2½ per cent. more than the companies offered, while the pieceworkers gain no more than was offered them.

The delay has not made a great deal of difference to the greater part of the North Island, except where feed has been drying off, as in other parts there is not a very large number of fat stock ready for killing. Canterbury will have a good supply of both lambs and sheep to start with as soon as the works open. The lamb crop is estimated at a quarter of a million more than last year.

Two Seasons' Killings.

Last season conditions were abnormal in New Zealand, being that the killings at all works in the Dominion reached a total of 4,658,879 sheep, 3,139,238 lambs, and 256,459 head of cattle. These figures show an increase over the preceding season of 968,745 sheep, 293,825 lambs, and 37,588 cattle. The shortage shown in the sheep returns on 30th April last is partly accounted for by the heavy slaughtering of sheep and lambs. As the total flocks have been decreasing for several years past, a lighter freezing season this year would check the downward tendency, especially as the lambing this season shows an estimated increase of a quarter of a million.

Insulated Steamers Available.

The latest information regarding space in insulated steamers is that there were recently in New Zealand waters thirteen insulated steamers with a capacity of 1,772,300 carcasses, including one for the United States with space for 90,000 carcasses, to take mutton, one for the United Kingdom to take beef, and one for the Continent to take beef. In January or February twelve steamers, including one to load beef for the Continent, having insulated space for 1,241,000 carcasses, will load meat in the Dominion. Space will have to be deducted from the total capacity for the carriage of dairy produce. Four boats have yet to arrive for December loading, representing a combined capacity of 435,000 carcasses. It is expected that by the end of January, or early in February, all the meat owned by the Imperial Government will be cleared from the stores.

[It is stated that the Ministry for Food Supplies has advised the High Commissioner that the rate for the carriage of private meat to the United Kingdom has been reduced by 5 per cent.—Ed.]

Amalgamation of Meat Freezing Companies.

Mr. Holland, the leader of the Labour party in Parliament, asked a question during the session as to a big amalgamation of meat and freezing companies on the east coast of the North Island. The Minister for Agriculture has stated that no such amalgamation or absorption has yet taken place, but some companies in the Poverty Bay district are at present considering proposals for amalgamation on co-operative lines. Three freezing works, viz., those of the Gisborne Sheepfarmers' Company, at Gisborne and at Hicks Bay, and the

Tokomaru Bay Farmers' Freezing Company, are concerned in these proposals, and four trading companies, two of the latter being co-operative companies, at Tokomaru Bay and Te Araroa. The aggregate capital of these companies does not total £1,000,000. The number of trading stores involved is six, including branches.

De-control of New Zealand Meat Wanted.

Mr. J. C. Cooper, managing director of the Wellington Farmers' Meat Company, Masterton, who has just returned from a visit to England, is strongly in favour of New Zealand meat being made free in the home market as soon as possible. He said the people who were using their best endeavours to prolong the control were big operators, shopkeepers, &c. Their object was to mix the cheaper New Zealand meat with the more expensive article grown by the farmers of Great Britain. The result was that only too frequently the Dominion product lost its identity. At a meeting of the Wairarapa sub-centre of the Farmers' Union the following resolution was carried unanimously:—

"That this meeting emphatically protests against price control in England of New Zealand free meat, unless all other meat in the Old Country is similarly controlled, and that the executive of the Farmers' Union be asked to take the matter up and bring it before the Government."

Mr. G. R. Sykes, M.P., who seconded the motion, warned farmers to be very careful regarding any resolutions they might pass. Twelve months ago they asked for the discontinuance of the commandeering on wool, for which they could not now get 6d. per lb. The same thing happened in regard to cheese.

New Zealand Meat in U.S.A.

Apparently the opponents of New Zealand meat in the United States are not above misrepresenting the true position. According to the cables, Mr. F. J. Hagenbarth, in giving evidence before the Senate Committee that is inquiring into the Emergency Tariff Bill, declared that 3,000,000 carcasses of lamb had been imported into the States from this country since the spring, of which 1,750,000 were now in cold store. The actual shipments of lamb from New Zealand to the United States from March until the end of December totalled 1,897,888 carcasses, and if 465,791 carcasses mutton are added, the aggregate does not reach two and a-half million carcasses, all of which could not possibly have reached America at the time of writing. Official figures show that on 1st October the holdings of frozen mutton and lamb in cold store in the United States from all sources of supply, including local, were 25,311,000 lbs., equal to about 700,000 carcasses.

Proposed New Works.

The South Canterbury Co-operative Freezing Company are not likely to get a start with the building of their works as they hoped, for they find themselves up against the high cost of building. At a recent meeting of directors six tenders were received for the erection of works at the Washdyke, near Timaru, but they were far in excess of the architect's estimate, and it was decided not to accept any of them in the meantime. A financial statement was put before the meeting, and it was agreed that before going on with the erection of the works it would be necessary to secure more capital from the sale of shares. It was decided to call the shareholders together next month, and place the position before them.

The Waitaki Farmers' Freezing Company have now obtained some £70,000 out of the capital of £110,000 that is required, and a canvass is being made for support in North Otago. It has been decided not to amalgamate with the South Canterbury Company

Contract for Sale Arbitration Case.

The British Divisional Court was recently called upon to adjudicate on a case stated by an arbitrator in connection with the sale of some Queensland tallow. The defendants (Yuill's Limited) sold to the plaintiffs—Thornett & Fehr—under a contract in writing "200 tons (5 per cent. more or less)" of Australian tallow of two special brands known as "Double Triangle B" and "Double Triangle T," the tallow to be of "1919 make," and to be shipped in May and August 1919. The sellers were agents of the Queensland Meat Extract Company. On the arbitrator's findings that

company could have manufactured this tallow in 1919, but it did not do so. It manufactured only 161 tons in 1919, and production was stopped by a strike. No further delivery was made, and the sellers contended that the contract was frustrated by events which were not within their control. They said that it must be taken to be an implied term of a contract to deliver goods "of 1919 make" that goods of that kind should be made in 1919. They contended that the limit of their liability was 29 tons, not 39 tons as claimed by the buyers, as they would have fulfilled their contract to deliver "200 tons (5 per cent. more or less)" if they delivered 190 tons.

The Lord Chief Justice, in his judgment, said that there was no frustration, and there could not be any in the case of a contract for the sale of unascertained goods. Moreover, the seller had done all that he was legally bound to do if he delivered not less than 190 tons, and the damages could only be for failure to deliver 29 tons, not 39 tons. The buyers were entitled only to damages for non-delivery of 29 tons.

New Zealand Frozen Meat Exports to the U.K.

(Season taken as from 1st January to 31st December.)

PERIOD.	Mutton.	Lamb.	Beef.
	Carcases.	Carcases.	Quarters.
Total for 1911	1,794,067	3,326,843	147,154
Total for 1912	2,360,789	3,191,197	149,397
Total for 1913	2,210,648	3,399,119	127,495
Total for 1914	2,771,102	3,044,777	371,004
Total for 1915	2,929,412	3,806,421	526,119
Total for 1916	2,456,115	3,118,317	727,772
Total for 1917	1,964,530	1,550,712	615,867
Total for 1918	1,348,884	1,317,989	537,017
Total for 1919	3,645,704	3,376,168	551,363
Total for 1920	4,676,575	2,031,473	591,546
Monthly Totals 1919,			
July	213,673	172,588	25,989
August	445,507	126,144	111,830
September	455,556	317,565	59,985
October	688,625	722,093	39,594
November	510,755	306,948	36,822
December	256,362	210,714	27,969
July to December	2,570,478	1,856,052	302,189
1920.			
January	216,214	119,437	20,016
February	256,935	157,578	20,852
March	243,434	112,624	16,615
April	189,346	157,159	33,380
May	337,170	228,274	43,255
June	298,874	334,471	45,373
January to June	1,541,973	1,109,543	179,491
July*	519,521	363,743	102,626
August*	177,277	65,391	16,646
September*	453,148	155,064	112,958
October*	623,075	62,754	82,123
November*	598,696	30,854	100,702
December*	762,885	244,124	—
July to December	3,134,602	921,930	415,055
Clearances reported for Dec.--			
Dec. 5—Tainui	73,145	37,181	—
" 10—Albion Star	—	—	56,869
" 11—Suffolk	106,569	589	—
" 13—Port Victor	87,667	47,762	—
" 15—Mahia	88,548	67,200	—
" 21—Remuera	52,263	—	—
" 22—Gallic	29,152	—	6,087
" 24—Port Caroline	90,220	67,563	—
" 24—Port Kenla	69,894	7,729	—
" 26—Taiaora	12,737	—	—
" 30—Ionic	34,870	6,038	—
" 31—Woodarra	28,739	—	37,746
" 31—Surrey	89,081	10,062	—
	762,885	244,124	100,702

* In addition to the above, 279,088 carcasses lamb were shipped to U.S.A. in March, and in April 222,568 carcasses lamb to U.S.A. and 6851 carcasses mutton, 11,875 carcasses lamb to Vancouver, B.C., and in July 10,092 carcasses mutton, 360,493 carcasses lamb to U.S.A. In August 6529 carcasses mutton, 596,987 carcasses lamb to New York, 10,060 carcasses lamb to San Francisco, U.S.A., and 3500 carcasses lamb to Vancouver, B.C. In September 21,317 carcasses mutton, 438,544 carcasses lamb to New York, U.S.A., and 6000 carcasses mutton, 3261 carcasses lamb to Vancouver, B.C. In October 126,914 carcasses mutton, 212,730 carcasses lamb, 593 beef to U.S.A., and 1000 carcasses mutton to Vancouver, B.C. In November 106,426 carcasses mutton, 173,325 carcasses lamb to U.S.A., and 2000 carcasses mutton, 4553 carcasses lamb to Vancouver, B.C. In December 181,913 carcasses mutton, 104,190 carcasses lamb to New York, and 1559 carcasses lamb to San Francisco.

Australian Frozen Meat Exports to Ports other than in United Kingdom.

(Season taken as from 1st July to 30th June.)

Period.	Mutton Carcases.	Lamb. Carcases.	Beef. Quarters.
Season 1911-12	167,120	26,480	197,479
1912-13	166,474	27,313	206,982
1913-14	224,283	33,529	379,353
1914-15	91,725	866	208,827
1915-16	20,814	10,750	34,902
1916-17	15,785	8,025	13,560
1917-18	320	—	4,171
1918-19	33,039	6,950	26,891
1919-20	154,968	41,612	99,869
Monthly Totals, 1919.			
July	2,842	537	4,703
August	7,125	2,143	51,616
September	1,920	297	4,035
October	6,618	2,524	3,233
November	4,328	1,297	4,256
December	2,880	1,262	2,728
July to December	25,713	8,060	70,571
1920.			
January	43,402	14,066	5,202
February	20,591	3,511	2,278
March	22,800	2,960	8,671
April	26,330	2,866	5,452
May	2,565	1,032	3,584
June	7,567	9,127	4,111
January to June	129,255	33,552	29,298
July	49,628	2,598	63,707
August	6,305	1,085	1,776
September	4,609	2,675	8,035
October	32,508	1,050	2,307
November	6,386	1,370	6,895
December	1,820	1,619	3,432
July to December	101,256	10,397	86,152

South American Cable Service.

(FROM OUR OWN CORRESPONDENT.)

SOUTH AMERICAN FROZEN AND CHILLED MEAT EXPORTS.

Period.	Mutton.	Lamb.	Beef. Qrs.
Total for 1911	8,048,262	1,092,155	3,807,320
" 1912	2,500,000	815,000	4,030,000
" 1913	1,909,061	671,290	4,477,160
" 1914	1,878,578	805,296	4,375,019
" 1915	921,436	442,132	3,581,842
" 1916	1,190,524	637,160	3,650,000
" 1917	783,250	408,250	2,795,500
" 1918	1,272,717	236,822	6,081,660
" 1919	1,462,366	216,014	5,119,928
" 1920	1,393,923	527,317	4,804,562
Monthly Totals—1919.			
July	94,805	13,604	344,016
August	151,808	33,192	534,035
September	122,958	10,527	290,137
October	112,768	6,603	466,409
November	158,023	27,135	547,681
December	41,981	8,134	266,651
July to December	681,843	99,195	2,438,878
1920.			
January	95,487	7,616	419,810
February	124,306	22,836	419,027
March	76,952	3,271	473,444
April	108,578	69,594	430,881
May	25,600	52,000	174,500
June	45,000	92,000	375,000
January to June	475,923	247,317	2,282,662
July	223,000	50,000	433,900
August	145,000	27,000	527,000
September	182,000	44,000	485,000
October	184,000	59,000	466,000
November	78,000	18,000	262,000
December	106,000	82,000	349,000
July to December	918,000	280,000	2,821,900

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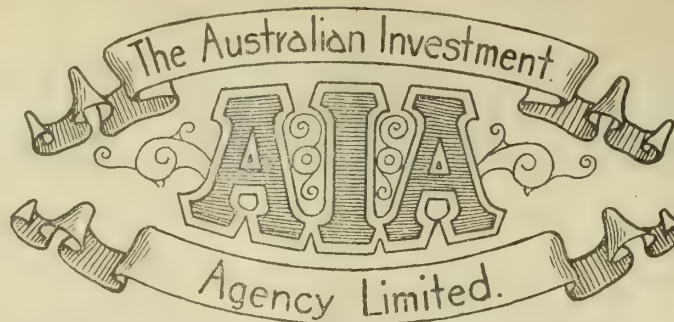
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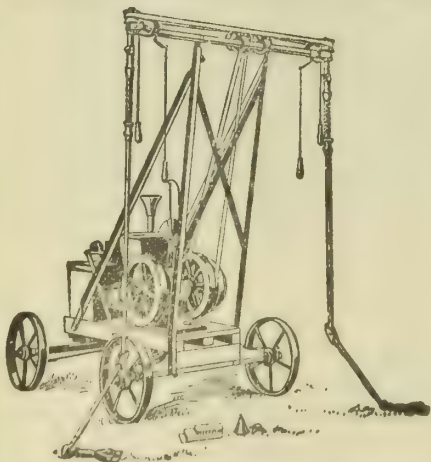
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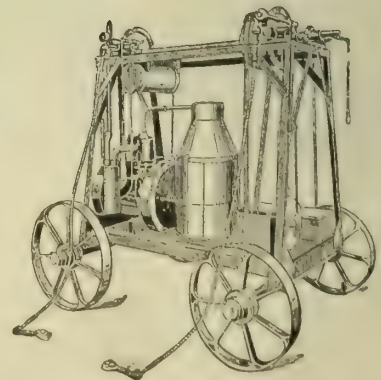
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Australian Frozen Meat Exports to United Kingdom.

(Only such vessels as have actually cleared the Australian Coast during any given month are included in that month's return.)

NEW SOUTH WALES.			VICTORIA.			QUEENSLAND. (Including Darwin.)			SOUTH AUSTRALIA, WEST AUST. and TASMANIA.			TOTALS.		
Mutton.	Lamb.	Beef.	Mutton.	Lamb.	Beef.	Mutton.	Lamb.	Beef.	Mutton.	Lamb.	Beef.	Mutton.	Lamb.	Beef.
Carcases.	Carcases.	Quarters.	Carcases.	Carcases.	Quarters.	Carcases.	Carcases.	Quarters.	Carcases.	Carcases.	Quarters.	Carcases.	Carcases.	Quarters.
909,604	271,527	16,741	851,034	1,047,182	4,087	78,549	602	429,731	69,901	131,340	276	1,909,088	1,450,651	450,835
808,188	294,424	8,477	518,855	735,621	9,074	681,957	40,424	1,046,000	82,582	117,901	2,846	2,091,582	1,188,370	1,066,397
1,315,437	403,533	78,195	961,914	1,278,898	115,280	402,486	25,250	1,058,213	18,817	34,216	24,064	2,698,654	1,741,897	1,275,752
1,529,702	552,569	135,730	738,774	1,196,410	130,957	628,176	37,301	1,584,946	35,051	81,233	24,396	2,931,703	1,867,513	1,876,029
291,486	361,843	551	—	47,546	—	263,565	52	903,582	—	—	—	555,051	409,441	904,133
436,943	205,695	54,780	52,927	365,274	20,230	432,571	1,722	1,541,762	—	—	2,622	922,441	572,691	1,619,394
81,776	14,052	7,483	48,783	146,903	—	45,026	10	1,399,336	2,212	962	602	177,797	161,917	1,407,421
278,980	63,694	5,006	656,677	31,023	2,491	59,837	—	687,473	38,067	21,295	—	1,033,561	116,012	694,970
828,413	293,992	21,910	2,251,411	1,526,578	13,559	182,597	1,132	749,998	309,113	95,417	7,162	3,571,534	1,917,119	792,629
—	—	—	—	—	—	—	—	152,238	11,009	8,723	1,554	11,009	8,723	153,792
32,343	3,305	—	303,190	101,978	221	1,998	—	142,485	8,546	—	—	346,077	105,293	142,708
87,316	13,975	—	3,051	20,622	—	58,266	1,110	115,799	43,794	—	—	221,427	44,707	115,799
37,068	9,598	—	217,028	217,576	—	20,167	—	50,910	76,512	30,384	—	350,755	257,558	50,910
100,771	75,788	34	305,037	286,591	—	26,435	—	126,530	42,415	10,405	—	474,658	372,784	128,564
118,169	96,133	243	445,105	429,874	5,137	11,339	—	20,307	21,517	8,661	4,355	596,130	534,668	30,042
375,667	198,799	277	1,362,411	1,065,841	5,358	118,205	1,110	608,269	203,793	58,173	5,909	2,000,076	1,323,723	619,813
39,006	8,798	803	275,375	203,615	—	—	—	—	5,143	—	—	319,524	212,413	803
65,579	11,861	1,609	355,202	172,179	3,350	—	—	—	38,984	24,818	—	459,765	208,858	4,959
18,591	5,058	—	16,351	938	—	—	—	—	10,409	—	—	45,351	5,996	—
52,771	10,227	319	124,740	47,828	3,822	49,383	22	54,074	—	—	—	226,894	58,077	58,215
146,095	28,586	6,758	164,070	35,647	1,029	15,009	—	41,921	50,784	12,426	1,253	375,958	76,659	50,961
130,704	30,663	12,144	13,262	730	—	—	—	45,734	—	—	—	143,966	81,393	57,878
452,746	95,193	21,633	949,000	460,937	8,201	64,392	22	141,729	105,320	37,244	1,253	1,571,458	593,396	172,816
21,072	8,531	—	52,112	8,077	—	—	—	34,279	30,757	173	—	103,941	16,781	34,279
8,914	2,077	—	33,561	32,088	7,503	793	—	49,216	20,309	4,840	—	63,577	39,005	54,719
11,083	12,361	52	167,391	50,451	1,583	—	—	127,163	3,580	477	15,308	182,057	72,239	144,406
14,791	325	—	56,140	19,839	1,833	—	—	104,018	4,853	5,539	—	75,784	25,753	105,851
25,711	1,100	679	5,826	2,751	52	—	—	—	4,141	864	634	35,708	4,718	1,365
1,618	5,933	—	2,100	14,451	—	—	—	58,954	13,850	128	—	17,568	155,512	58,954
83,219	30,327	731	317,133	271,710	10,971	793	—	373,930	77,490	12,021	15,942	478,635	314,058	401,574
—	—	—	—	—	—	—	—	21,882	—	—	—	—	—	21,882
—	—	—	—	—	—	—	—	5,346	11,798	128	—	11,798	128	5,346
—	—	—	—	—	—	—	—	29,510	—	—	—	—	—	29,510
—	—	—	242	16,627	—	—	—	—	—	—	—	212	16,627	—
1,618	—	—	1,453	83,602	—	—	—	—	2,052	—	—	5,123	86,602	—
—	5,933	—	375	35,777	—	—	—	2,216	—	—	—	375	41,710	2,216
—	—	—	30	10,445	—	—	—	—	—	—	—	30	10,445	—
1,618	5,933	—	2,100	149,451	—	—	—	58,954	13,850	128	—	17,568	155,512	58,954

1920.

TO OTHER PORTS.

December 7—*Marsina*—From Brisbane: 40 quarters beef to Rabaul
 10—*Taiyuan*—From New South Wales: 209 carcasses mutton to Manila; 217 carcasses mutton, 750 carcasses lamb to Hong Kong. From Queensland: 754 quarters beef to Manila, and 550 quarters beef to Hong Kong
 11—*Montoro*—From New South Wales: 1379 carcasses mutton, 769 carcasses lamb; from Queensland: 2088 quarters beef— all to Singapore.
 18 *Eastern*—From New South Wales: 100 carcasses lamb to Manila and 15 carcasses mutton to Kobe.

The clearances of frozen meat from the Commonwealth to all overseas ports during December totalled 19,388 carcasses mutton, 57,131 carcasses lamb, 62,386 quarters beef, which, compared with the output for November, shows an increase of 151,043 carcasses lamb, 54,126 quarters beef, and a decrease of 22,706 carcasses mutton.

When placed beside the total for the corresponding month of last year (December 1919) there is an increase of 29,616 quarters beef, and a decrease of 579,622 carcasses mutton, and 378,799 carcasses lamb.

An analysis of the various exports for the month under review shows that 17,568 carcasses mutton, 155,512 carcasses lamb, and 58,954 quarters beef were consigned to Great Britain, while ports in the east, &c., take the balance, 1820 carcasses mutton, 1619 carcasses lamb, and 3432 quarters beef.

Queensland sent away 62,386 quarters beef, Victoria 2100 carcasses mutton and 149,451 carcasses lamb, South Australia 13,850 carcasses mutton and 128 carcasses lamb, New South Wales 3438 carcasses mutton and 7552 carcasses lamb.

Meat Notes.

The Wimmera Inland Freezing Company, Murtoa, Vic., ceased killing the end of the year after putting through some 33,000 lambs.

The directors of the Sydney Cold Stores Limited have declared a dividend of 1s. per share for the past half-year. The profits were £7879.

Exports of frozen beef from South Africa during October were 2388 quarters, and the total for the ten months—January to October—were 58,255 quarters.

The accounts of the Canterbury (N.Z.) Frozen Meat and D.P. Export Company Limited show a net profit for the year of £43,330. After deducting the dividend paid at the half-year, and transferring various sums to the different reserve funds, further dividends of 3 per cent. on preference, and 6 per cent. on ordinary shares, together with a bonus of 4 per cent. on the latter, are being paid.

"Cold Storage" states that the project for the establishment of dead meat export works at Waterford, Ireland, by the Irish Co-

operative Meat Limited is progressing, and it is reported that a site at Waterford has now been definitely acquired. At a recent meeting of the organising committee 160,000 shares applied for were allotted to 5000 applicants, and all the capital necessary for the undertaking is said to be assured.

The German Government the end of September purchased for cash 22,016,000 lbs. of American lard at 1s. per lb.; 22,046,000 lbs. of American dried and salted meat at 11½d. per lb., and 22,046,000 lbs. of frozen beef from South America. According to official estimates, this amount was expected to supply domestic needs until 1st January, 1921. It is stated that Germany is negotiating with American packers to induce the latter to place a stock of meats in their warehouses at Hamburg and Bremen, this stock to be dispensed as the Germans are able to pay for it.

The profit made by the Poverty Bay Farmers' Meat Company, Gisborne, N.Z., for the past year amounted to £24,062, including receipts from the earnings of the company's steamer, "Admiral Codrington." A dividend at the rate of 8 per cent. per annum is being paid on all shares. The directors propose to arrange some reliable basis of distributing meat in Great Britain on behalf of the shareholders at an early date, and, if necessary, build a freezing store at a suitable port in England. To meet the requirements of the company it will be necessary for the company to have its own staff at Home to handle the company's produce there. This is considered all the more necessary now that the company has its own boat to carry its produce.

A prospectus has been issued in Sydney for a scheme to export frozen beef from districts which are away from the hub of civilisation, and which are not supplied with freezing works. The first object of the syndicate is to raise a capital of £10,000 locally, and then send an emissary to London to form a company of £350,000 to carry out the proposed scheme. It is proposed to purchase a steamer, and to fit her out to carry 7700 carcasses of frozen beef, and make her a perambulating freezing works. The vessel is to be sent wherever cattle are available at a cheap price. Such places as Northern Brazil, the Amazon, northern and north-western parts of Australia, as far down as Port Hedland and the Roper River are mentioned. The cattle will be killed, dressed, and frozen on board, and, like the whaler, when she is full up, she will go to Europe and sell her cargo.

United States Meat Stocks.

Exports and Imports.

The following table gives an official summary of the holdings of frozen and cured meats in cold store in the United States on 1st October last, compared with the previous month and 1st October, 1919:—

	Oct. 1, 1920.	Sept. 1, 1920.	Oct. 1, 1919.
	Lbs.	Lbs.	Lbs.
Frozen beef ...	58,284,000	67,010,000	166,244,000
Cured beef ...	19,632,000	22,711,000	37,328,000
Lamb and mutton	25,311,000	11,021,000	8,318,000
Frozen pork ...	87,492,000	129,197,000	61,417,000
Dry salt pork	233,801,000	316,433,000	332,786,000
Pickled pork...	303,535,000	361,381,000	297,712,000
Lard ...	110,256,000	170,747,000	76,456,000

The exports during September and the nine months ending 30th September last and the previous year were:—

	September		Nine Months Ending Sept.	
	1920.	1919.	1920.	1919.
	Lbs.	Lbs.	Lbs.	Lbs.
Beef, canned ...	244,261	1,152,616	23,314,912	48,794,233
Beef, fresh ...	1,964,543	7,249,366	84,489,590	121,543,894
Beef, pickled, &c.	1,613,657	3,472,021	10,140,803	33,089,581
Oleo oil ...	5,819,421	6,730,818	49,271,177	55,669,419
Bacon ...	41,371,561	57,209,378	460,161,522	1,009,564,046
Hams & shoulders	8,997,124	18,209,239	150,769,259	551,176,109
Lard...	46,326,353	36,960,364	410,679,571	614,135,032

The imports for August and the eight months ending 31st August are shown in the appended table, taken from "The Producer."

	August		Eight Months Ending Aug.	
	1920.	1919.	1920.	1919.
	Lbs.	Lbs.	Lbs.	Lbs.
Fresh meats—				
Beef and veal (total)...	5,618,896	3,055,116	31,626,080	25,003,057
From Canada ...	5,437,659	2,593,628	22,702,225	20,329,794
From Argentina ...	—	—	1,110,860	—
From Uruguay ...	181,119	—	286,799	12,672
From Australia ...	125	114,041	1,608,540	964,923
From other countries ...	—	347,547	5,818,627	3,606,568
Mutton and lamb ...	13,956,578	512,243	31,243,102	4,612,422
Pork ...	47,959	234,155	757,170	1,762,865
Tallow ...	2,890,415	133,858	7,680,339	6,916,789

Position and Prospects in Great Britain.

(FROM OUR OWN CORRESPONDENT.)

LONDON, 2nd December, 1920.

The Current Situation.

The frozen meat trade here is standing on the threshold of another season with stranger feelings, perhaps, than ever before.

In the days of war it was in a strait jacket, and could only stand by and be fed by its master, the Government.

Now it is like a young swimmer hesitating before a winter plunge. What encouragement has it?

There is small c.i.f. business in lamb on a basis of 1s. 1d., which means no profit, but just the assurance—perhaps—of a class of meat that everyone must stock. Freight, though promised in a ratio of 20 per cent. at the most important time, February, is still uncertain, and the horizon is further clouded by the prospect that a big buyer is reported to have picked all the plums in New Zealand on a half-output basis, with an option on the remainder—which means, "heads I win, tails I don't lose."

The appearance of the United States as a buyer with a bigger mouth than Great Britain could ever hope to develop has cast another shadow. It is generally believed that this new position places another lever in the hands of the Beef Trust firms in their world-wide operations. Obviously, they have another balance to tip in the poise of prices in two hemispheres. There is little to stand in their way now save the one big British operator, and the British trade is fervently praying that Vestey's may be the sound barrier that their position gives them the power of being.

One remembers the remark in Justice Ewing's report in Australia on the Trust question:—"I believe Vestey's and the few other British meat companies that remained have fought valiantly against this domination, and that Vestey Brothers, with the few other companies, are standing, as Mr. Flannery put it, in the last trenches of the British meat industry."

The present market position is that while home-killed meat is in abundant supply and slumping in price, New Zealand mutton and lamb are insufficient in their arrivals, and may be termed "short." It is only the poorer frozen stuff which is difficult to sell, and there are fair quantities of that still about.

There is no doubt that the way farmers have forced up the price of home meat has led to a very considerable strengthening of the frozen market, and this is felt in most provincial centres just now.

As regards forward business, the Ministry of Food, which is still in being, though heartily cursed by trade and consumer alike, has notified that it will not take off lamb maximum prices before 31st March, so that c.i.f. buyers may have some modicum of protection. As a matter of fact, there is every probability that if control were abolished altogether, prices would soon fall away, after perhaps a brief bound upward.

At the moment little forward business is spoken of. For mutton 6s. c.i.f. is being asked, and only yesterday I was told of the acceptance of an offer of 5s. 8d., but I have not heard on what conditions. Shipment uncertainties govern the whole affair.

As to the period for which the Ministry of Food is likely to remain in being, it has recently been thought that the meat and other sections were on the point of "packing up." But this is hardly likely yet awhile. Mr. McCurdy, the Food Controller, officially forecasts for the Ministry about one more year of life, but things may get so hot politically for the Government during the spring that the whole fabric may be dispersed before midsummer. The Prime Minister would have little compunction in jettisoning his Minister if that were necessary to save his skin at the most awkward period of his career.

Smithfield Supplies.

The total supplies of all kinds at the London Central Markets during the past month amounted to 31,968 tons, which compares with 37,885 tons in October, and 25,510 in the corresponding month of last year; the pitchings for the similar period of 1913 amounted to 32,843 tons.

Of the quantity received at Smithfield in November, 29,772 tons were accounted for by beef, mutton and lamb, pork, &c., of which the proportions are:—British and Irish meat, 5346 tons; imported, 24,426 tons. The pitchings of Australasian mutton and lamb last month included in the above totals amounted to 8423 tons, and of South American beef and veal 11,698 tons.

Latest prices of home-killed meat at West Smithfield, as reported in the markets yesterday, were:—

	Price per 8 lb. stone.	
	s. d.	s. d.
Beef—		
Scotch, short sides	13 4	13 8
English, long sides	10 4	11 0
Mutton—		
Scotch	13 4	14 8
English	12 0	13 4
Lamb—		
Hill	14 8	16 0

I understand that inquiries have recently been made of late by those in the meat and produce trades at Glasgow as to the possibility of the Scottish port being made a direct port of call for frozen cargoes next year. Doubtless this desire may find some answer among those who are anxious to develop Australian business direct with the northern centres of Britain when free trading extends. There are always, of course, two leading considerations in such developments, namely, the existence of a market at the proposed port having a real consumptive capacity, and, secondly, the readiness of return cargoes from that port. If these factors can be assured, direct trade is almost a certainty. The dearer railway freights should certainly prove an impetus for the movement towards direct shipment to the provincial ports.

Meat Handling in London.

The City of London Medical Officer has fluttered the dovecoats of the market authorities in the metropolis by a very outspoken condemnation of the conditions under which meat is despatched, after sale, from the Central Markets, West Smithfield. The attack does not concern the market itself, in which the salesmen conduct business under hygienic conditions, but when the meat leaves the market for conveyance to the suburbs, then it is that the evil occurs. The porters are said to have dirty caps; or none at all; they deposit the meat on the dirty pavement outside; it is put into dirty carts, and often trodden on by the men in the carts. Moreover, a dog is often in the cart, and the driver frequently sits on the bare meat.

The Ministry of Health is said to have the whole question under consideration, but if it pays as much attention to the matter as the Local Government Board has done in the past little reform will result, for as far back as 1907 the City Corporation of London asked the Local Government Board, in issuing regulations under its Public Health Act of that year, to include one prohibiting the conveyance of meat through the public thoroughfares except in suitable vehicles, in which the contents are properly covered, and not exposed to view. Nothing resulted from that appeal!

English Meat Works.

Last month there was laid at Cantley, near Norwich, the foundation stone of the meat-killing works which are to be operated by the Improved Chilling and Transport Limited. This project is a sign of the times, and is designed for the two-fold object of developing the meat products on a more scientific basis on the spot, and generally to enable the meat grower to utilise local advantages in the marketing of his meat. The East Anglian pastures of the locality are the finest in England, and cheap transit is provided by means of 150 miles of waterways, with which the new factory is served. Local interests are being studied in every way, and the company, which is exclusively of British character, claims to stand as a buttress against the American Trust and monopolist influences by which the farmer is threatened. The company will be aided in the marketing of its meat in the finest condition by the "Imchilleco" process, by which, before the war, 1½ million quarters of beef from the Argentine were enabled by a sterilised atmosphere to be marketed in Great Britain in a first-rate condition. The Cantley works are expected to be in operation before the summer, and will kill 100 bullocks a day.

The Trade in Parliament.

In the House of Commons a few days ago Mr. Ratcliffe asked the Food Controller if he were aware that nearly 1,750,000 of new season's best straight New Zealand lambs have been sold to speculators by his department at a profit, and exported to the United States, where they have been sold at about 9d. per lb., whereas the only New Zealand lambs coming to this country are old stored cut lambs, for which his control price is 13d. per lb., and whether it would be better to let this country have the benefit of a good share of the best lamb, and so help to increase its consumption at a reasonable price, and so be a means of reducing the abnormally high prices of English meat.

Mr. McCurdy replied that the shipments to which the hon. member referred consisted of last season's lambs. In view of movements in the rate of exchange, as he had already pointed out to the hon. member in reply to similar questions on 5th and 16th August, such a comparison of sterling and dollar prices as that suggested in the question was misleading. The suggestion that the only New Zealand lambs reaching this country were cut lambs was quite incorrect. A large proportion of the supplies, past and present, to this country was identical in description with the lambs which had been shipped to the United States. With regard to the last part of the question, the supplies of New Zealand mutton and lamb available for consumption in this country had been ample to satisfy the demand, but he regretted to say that this fact so far had exercised little apparent effect in the direction of reducing the prices for home-grown mutton and lamb.

The Government Committee on Trusts and Trade Combinations is understood to be active just now, which lends importance to a question which Major Barnes asked in the House of the President of the Board of Trade, viz., if there was any evidence in his possession showing that the price of commodities and, in consequence, the cost of living, was increased by the action of trusts and other similar trade combinations; and, if so, whether early legislation was contemplated.

Sir Robert Horne replied that recent inquiries did not show that at the present time any effect was being produced in the way of increasing the cost of living by the action of trusts. It had already been stated that it would not be possible to introduce legislation for dealing with trusts this session. There were many instances showing that the action of trusts had tended to give people commodities at reduced prices.

Cold Storage Congress.

A meeting of the cold storage and allied trades was held in London last month for a preliminary discussion as to the organisation of the Fourth International Congress of Refrigeration, which it was stated, has been invited to London and is planned to occur in June 1922. Lieut.-Col. Sir Thomas B. Robinson, G.B.E., K.C.M.G., as president of the Cold Storage and Ice Association, took the chair, and emphasised the importance of the international gathering, which would bring delegates from the four corners of the earth, and would be likely to be productive of good business for British goods and manufactures. Mr. J. Raymond, the British honorary secretary of the International Institute of Refrigeration, stated that the Government was anxious for the holding of the next congress in London, and would, he thought, give what support it could. In view of national finances, financial help might not be forthcoming by the Government, but the industry would probably see to it that the organisation did not lack for funds. A number of frozen meat and shipping firms had already expressed their intention, as parties deeply interested in the progress of refrigeration, to do their share. There were over forty countries which would be sending their official Government delegates to this great assembly, which should do much for British trade.

Firms' Reports.

Gilbert Anderson and Co. Limited (Good Demand All Round), 30th November, 1920:—"Good demand continues at maximum prices. Storage companies are again canvassing for storage. New Zealand mutton is particularly in demand, and noticeably short supply. Buyers are keen to secure forward supplies of lamb of 1920-1921 killings, and it is hoped that the Government price control will not prevent business. No alteration in the control price of lamb is to be expected at least

before the 31st March next, according to the latest official announcement. Beef has been in good supply, with top maximum prices obtainable for best descriptions, otherwise no change.

L. C. Ballantine and Co. (N.Z. Lamb Stocks Light), 25th November, 1920:—"Throughout the United Kingdom the light stocks of New Zealand lambs are being felt, and as a consequence the demand for mutton has become very much greater. The trade eagerly purchases any releases of meat made by the Ministry of Food. Home-grown supplies are fairly liberal, and are augmented by arrivals of Dutch mutton and pork, as well as Danish beef. New Zealand sheep's kidneys have made 3s. 6d. per dozen, and offer generally in good demand."

The Colonial Consignment and Distributing Company Limited (A Market Shortage), 30th November, 1920:—"New Zealand mutton and lamb are supplied in very limited quantities, and the trade could easily do with more. Full controlled prices have been realised. Australian mutton and lamb have been pitched on the market in sufficient quantities. Good well finished carcasses make controlled price, but owing to indifferent quality, an abatement of 1½d. per lb. has had to be made in some cases. New Zealand and Australian beef of good quality has made 11½d. per lb. for hinds, and 7½d. per lb. for forequarters, but plain, unfinished quarters must be quoted at 1½d. per lb. less. Home-killed meat, as well as Dutch, exhibits a weaker tendency, especially pork. On Thursday and Friday last, small choice Dutch and/or English pigs made up to 2s. 3d. per lb., whilst the heavier weights could easily be purchased at 1s. 7½d. per lb. The market is over supplied with meat and is not cleared, and unless anything unforeseen occurs, a lower range of prices must be expected."

Henry S. Fitter and Sons (Recent Arrivals Brighter Meat), 24th November, 1920:—"During the last four weeks New Zealand mutton and lamb have been passing into consumption almost as soon as the carcasses were landed; in consequence the available stocks are very short. There is a marked improvement in the condition of most of the cargoes recently received, the meat having a brighter appearance. There should be no congestion or heavy stock of Government meat by the time the new season's carcasses arrive in any considerable quantity. Home-killed meat, although reaching this market in moderate quantities, is not meeting with a very strong demand, and prices are not quite so firm, owing to supplies of Irish, Dutch, and Danish meat."

Gordon, Woodroffe and Co. (C.I.F. Buyers Keen to Operate), 24th November, 1920:—"The importation of frozen meat from Australasia this past month has been very limited, and the demand has far exceeded the supply; the position has been intensified by the sale of the cut ewes to the continent, as owing to this, combined with the demands of the War Office for army requirements, anything from one to two-fifths of each shipment is unavailable for distribution amongst civilians in U.K. There has been a keener demand for straight or whole mutton, with a corresponding decrease in the demand for lamb. Fortunately this has happened, as the stuff available to Xmas is approximately in the ratio of ten sheep to one lamb. C.I.F. buyers are keen to operate, but at present are not prepared to give the high prices asked for in Australasia. It does not seem to be realised that the maximum price is still controlled, and to sell over these prices is illegal."

The London Produce Company Limited (Forward Australian Business), 25th November, 1920:—"There is no increase in supplies of New Zealand and Australian mutton and lamb. New Zealand mutton is wanted for its better quality. Such lambs as are available are much sought after. No doubt the high prices maintained for home killed diverts the trade to the cheaper frozen meat. Some sales have been made of Australian lambs for forward shipment at 1s. per lb. c.i.f.; a few buyers are inquiring for New Zealand offers, but no business is being done at present in this direction. Beef sells well if of good quality, but inferior descriptions are difficult to sell unless at much reduced prices."

S. V. Nevanas and Co. Limited (Prices Out Of Proportion), 25th November, 1920:—"In the present transition period between the sales of the Government frozen meat residue and the resumption of shipments to this country by the exporters from Australia and New Zealand, a number of people seem to have lost all sense of proportion, and are paying prices for lambs which at the present maximum can only result in a serious loss. We believe that many people are of opinion that the maximum price will be raised for lamb, but there is certainly nothing in the Government's present attitude to warrant such an assumption. At any rate the general feeling amongst distributors is to hold off from buying, and to run the risk of having to pay higher prices when the goods arrive in this country. This is a sound proposition from the retailers' point of view, as owing to the Government system of licensing retailers, competition has been eliminated to a large extent, and retailers generally receive the whole of the difference between the wholesale and the retail prices fixed by the Government. In regard to mutton and beef, the forward position is too uncertain to forecast at present, but there is a steady demand for the best quality, while inferior qualities are a dragging trade, and retailers report that in many districts there is a great short

age of money, and in the manufacturing districts especially a hard winter is expected."

The New Zealand Loan and Mercantile Agency Company Limited (Government Stocks To Be Cleared By April), 25th November, 1920:—"This market is still controlled by the Government. Good progress has been made with sales of mutton, lamb, and beef, lamb being particularly short, and in keen demand. It is thought that Government stocks will be cleared by the end of April 1921. Arrangements have been made for a certain percentage of free shipments on each steamer, and we understand forward business has been done in Australian lamb, but sellers' ideas of lamb values are very high."

Zwanenberg Limited (Continental Demand Possibilities), 26th November, 1920:—"Trade in Smithfield Market is not brisk, and small supplies fill requirements. Good quality New Zealand mutton is short and much wanted. Owing to the shipments to America of New Zealand lambs, the supplies available here are not sufficient for requirements. Forward business with Australia has been done in small quantities of lamb, and buyers would be interested in offers of New Zealand mutton and lamb if at prices that would meet the controlled prices yet ruling. We do not anticipate that the present small Dutch veal, mutton, and pork supplies will increase before next autumn, but then we should not be surprised to see them arrive in quantities approximating to pre-war. There is some demand for the continent, but not at very high prices. We would not be surprised to see this business increased considerably in the near future."

General Paragraphs.

The onward march of that wonderful business, the Union Cold Storage Company Limited, is again illustrated in the bigger figure reported on the past year's trading. The accounts for 1919 disclose a gross profit of £317,500, as compared with £304,600 for 1918 and a net profit of £169,400, as compared with one of £154,400. After providing for the usual 10 per cent. dividend on the ordinary shares the directors are able to add £20,600 to the company's undivided profits. In March last, in connection with the acquisition of the Blue Star fleet of fifteen refrigerated steamers, the capital was increased by £2,700,000, while the additional capital was subsequently offered for subscription. In September last an offer was made for the acquisition of the business of Fletcher (meat importers). The next accounts will consequently show a large increase in the company's capital obligations. There is, however, good reason to hope that there has been a corresponding increase in the earning capacity of the enlarged undertaking.

A development in India, which is of considerable interest to the frozen meat industry, is the withdrawal by the Secretary of State for India of a concession previously enjoyed by a company for the slaughter in the country of 200,000 head of cattle every year. This is regarded as a wise step in the interests of the preservation of live stock in India, and it also pleases the natives. The needs of the British garrison in India on a peace footing are said to amount to 100,000 head of cattle per annum, and it is thought that Australian frozen meat may well be substituted for the native supply.

The annual colonial meat and produce report of Messrs. Gilbey Anderson and Co. Limited (6 Holborn Viaduct, London, E.C.), a welcome trade feature at this time of the year, and one pleased to note that in its lucidity and breadth of treatment follows on very close lines those which were so well appreciated from the pen of the late Mr. Gilbert Anderson. Frozen meat comprehensively dealt with, and one of the features of the report is to make it quite clear that frozen meat during the past year has served to prevent the British consumer being held up by the rapacious demands of the home farmer and meat speculator. Regarding the period ahead and the big figure that America is making in the market just now, the report says: "The Americans will have a decided advantage in the exchange, which fact should not be overlooked by producers, particularly in view of the fact that the American preference favours lamb and lightest weight mutton. Our advice is sell to America if sales can be effected for cash on prompt shipment and at prices well above those ruling here. But if once the American market is overloaded the result will be serious to the holders, as meat cannot be distributed to the populated areas at slight cost as can be done in the United Kingdom. Undoubtedly the keenness of the Americans will wane when once the English exchange is re-established to nearer its sterling value." Mr. Gavin B. Anderson, who recently paid a visit to New Zealand, is closely identifying himself with all matters pertaining to the meat and produce trade, and he is ably assisted by his director, Mr. F. F. Rowley, who was assistant for many years to the late Mr. Gilbert Anderson.

The general understanding is that the Ministry of Food intends to maintain its maximum prices until next midsummer, when probably control will finally fall. If this be the case then we may yet another season to look forward to in which the quality of meat will count the least, and, of course, this will act to the detriment of producers of the better class stuff, notably New Zealand. Moreover, the influence will probably be to spoil the British market in frozen meat to some extent.

Australian and New Zealand Produce in London.

LONDON, 2nd December, 1920.

Canned Meats.

Business in canned meats at the moment still continues very bad; in fact, one hears this description applied at the moment to nearly all business in the country. Supplies are coming forward in limited quantities, but stock on hand is still very large, demand for the time being having fallen away completely.

Where holders are badly in need of money they have been taking very low prices; I hear the Ministry of Food in Newcastle sold some 6's at about 35s. per case, although it has to be stated that the quality is reported not to have been A1. Where buyers are in need of stocks they are quite willing to pay the price asked, but the money shortage is another factor, causing them to restrict their orders as much as possible.

Boiled mutton is in short supply, and would meet with a fair market in round tins at about 70s. a case. Boiled beef is about 65s. per case. Corned mutton sells slowly at 63s. to 66s., and corned beef pretty well unsaleable, except at about 52s. to 54s.

Very little is doing with extract of meat. Supplies are short owing to few canneries being in operation at the moment, but the demand could not be much worse than at the moment. The nominal value for best quality is from 3s. 3d. to 3s. 6d. per lb.

Butter and Cheese.

The Food Controller has announced this week that the next distribution of Government butter, next week, will be at the rate of 2 oz. per head per week, the retail price remaining unchanged at 3s. 4d. This represents an advance of $\frac{1}{2}$ oz. per head weekly. Apart from this, there is very little to refer to in the butter situation. Contrary to general expectations, a little Irish is still coming to hand; it is quoted at 490s. to 500s., separators about 455s. Free export from Denmark is announced as from Monday next, with no restrictions whatever, but private importation to this country remains prohibited throughout the winter. During this month the following steamers are expected from Australia:—"Tropic," with 10,000 boxes, "Wiltshire," with 16,500 boxes, "Ormonde," with 13,300 boxes, and the "Persic," with 23,900 boxes.

Basils and Leather.

There has been very little business doing in basils during the past few weeks, though a small demand is reported in certain quarters for the prime qualities. Medium and low sorts, however, are practically unsaleable, and prospects continue unfavourable. The flat tone of the leather market mentioned in my previous reports continues.

Sheepskins.

Just over half of the 5787 bales of Australian offerings at the public sales of Government skins last month were sold. Generally prices were about 25 per cent. below those prevailing at the last auctions in September. Transactions were on the following basis:—Merinos, full-woolled 9d. to 18 $\frac{1}{2}$ d. per lb., $\frac{1}{2}$ -woolled 5 $\frac{1}{2}$ d. to 11d.; short and shorn 1 $\frac{1}{2}$ d. to 6d. per lb. Crossbreds, full-woolled, fine 8d. to 14 $\frac{1}{2}$ d., medium and coarse 5d. to 7d.; $\frac{1}{2}$ -woolled, fine 6d. to 10d., medium and coarse 4d. to 5 $\frac{1}{2}$ d.; crossbred lambs 6d. to 10d.; short and shorn, 2d. to 4 $\frac{1}{2}$ d. per lb.

Rabbit Skins.

Last week the final auctions of Australasian rabbit skins were held in London, when of the 3315 bales on offer, 1656 were sold. A sharp decline in prices has to be chronicled, consequent on the heavy offerings, the present state of the financial situation, and the recent reaction in the prices of fur skins. Demand was keen, and a fair portion of the offerings changed hands on the lower basis. Prime season and good winters Australian and Tasmanian offerings were competed for up to within 50 per cent. of September prices, but incoming and medium season were about 40 per cent., and inferior sorts from 30 to 40 per cent. below the September values. There was little change in hare skins, which sold from 2s. to 17s. 6d. per dozen.

For full season New Zealand skins fair support was in evidence, but the bulk were bought in, although some offerings changed hands at about 30 per cent. decline in values. Generally speaking, best grades were 50 per cent., and off-season racks and suckers 40 per cent. lower.

Hides and Skins.

Little business is being done in this market, either forward or on spot, of late. Heavy stocks are still in evidence, and the depression in the shoe and leather trades shows no signs of improving.

Tallow.

More inferior tallow seems to be offering of late than is required, and there is quite a good demand for edible beef and mixed, with a smaller inquiry for edible mutton sorts. Supplies of these better sorts on spot are scarce, and this fact has helped to sustain to some extent their values on the month, though

prices all round are much below the level of those prevailing last month. Present quotations for sorts are:—Mutton, fine 63s., fair to good 55s. to 60s., common to middling 44s. to 54s., and low to inferior 40s. to 44s.; beef, fine 75s., fair to good 51s. to 60s.; common and inferior on the same basis as mutton sorts; Australasian mixed, fair to good 51s. to 60s., common to middling 40s. to 50s.

Useful Hints.

Cleaning a Clock.

Provided the spring is not broken, the usual cause of a clock stopping is an accumulation of dust particles in the bearings. These can often be removed by the following simple plan without taking the works to pieces:—Soak a piece of cotton wool in kerosene and place in a small saucer, canister lid, or anything similar. Put this in the case of the clock under the works, and close up. At the end of twenty-four hours it will be found that the wool is covered with black specks; these are the dust particles brought down by the fumes of the kerosene. Wind the clock up and it will probably go all right. Where the works are in an enclosed case a few drops of kerosene should be poured through the small hole which is present in the metal covering. Turn the clock about a while so that the kerosene is distributed, and after an interval it is extremely likely that the works will commence their normal operations again.

Hot Weather Rules for Horses.

Many of the following suggestions for the care of working horses, prepared by the Boston, U.S.A., Work Horse Relief Association, will be found useful in Australia during the summer:—Load lightly and drive slowly; stop in the shade if possible; water often, but only give small quantities; after work sponge off harness marks and sweat; do not wash at night; once a week give bran mash, lukewarm, with a tablespoonful of saltpetre added.

If a horse is overcome by heat get him into the shade, remove harness, wash out his mouth, sponge him all over, shower his legs, and give him 2 ozs. of aromatic spirits of ammonia, or 2 ozs. of sweet spirits of nitre, in a pint of water; or give him a pint of coffee warm. Cool his head at once, using cold water. If the horse is off his feed, try him with 2 quarts of oats mixed with bran, and a little water; and add a little salt or sugar. Or give him oatmeal gruel or barley water to drink.

Sheep Licks for Various Diseases.

The Stock Department, New South Wales Department of Agriculture, has at different times recommended the following licks for the diseases specified:—

1. Stomach Worms and Fluke.—Liverpool salt, 200 lbs.; sulphate of iron, 15 lbs.; sulphur, 10 lbs.; powdered charcoal, 10 lbs.; gentian, 2 lbs.
2. Worms in Lambs.—Liverpool salt, 10 lbs.; bonemeal, 5 lbs.; sulphate of iron, $\frac{1}{4}$ lb.
3. Worms in Sheep.—Liverpool salt, 30 parts; bonemeal, 5 parts; sulphate of iron, 1 part; or Liverpool salt, 40 parts; calcium phosphate, 5 parts; sulphate of iron, 1 part.
4. Lung Worms in Sheep.—(a) Salt; (b) Liverpool salt, 40 parts; sulphate of iron, 1 part; (c) Liverpool salt, 28 lbs. to 56 lbs.; turpentine, 1 pint.
5. Defective Bone Development.—Bone ash, mixed with molasses and a little salt added.
6. Osteomalacia.—Bonemeal, 20 parts; crushed salt, 5 parts; sulphate of iron, 3 parts; or salt, 40 parts; bonemeal, 10 parts; sulphate of iron, 1 part; or bone ash, 1 cwt.; common salt, 5 lbs. or 6 lbs.; sulphate of iron, 4 lbs., with sufficient molasses to make a coherent mass, and flavour it.
7. Lime for Stock.—Salt, 5 parts; lime, 1 part; sulphur, 1 part; sulphate of iron $\frac{1}{2}$ part.
8. Antepartum Paralysis in Sheep.—Coarse salt, 100 lbs.; Epsom salts, 7 lbs.; sulphate of iron, 6 lbs.
9. Black Disease.—Sulphur, 10 lbs.; hyposulphite of soda, 1 lb.; sulphate of quinine, 1 lb.; powdered charcoal, 10 lbs. to 20 lbs.; or equal parts Liverpool salt, Epsom, or Glauber's salts, sulphur, and ginger; or Liverpool salt, 200 lbs.; Epsom or Glauber's salts, 25 lbs.; nitre, 25 lbs.; sulphur, 20 lbs.; chlorate of potash, 2 lbs.



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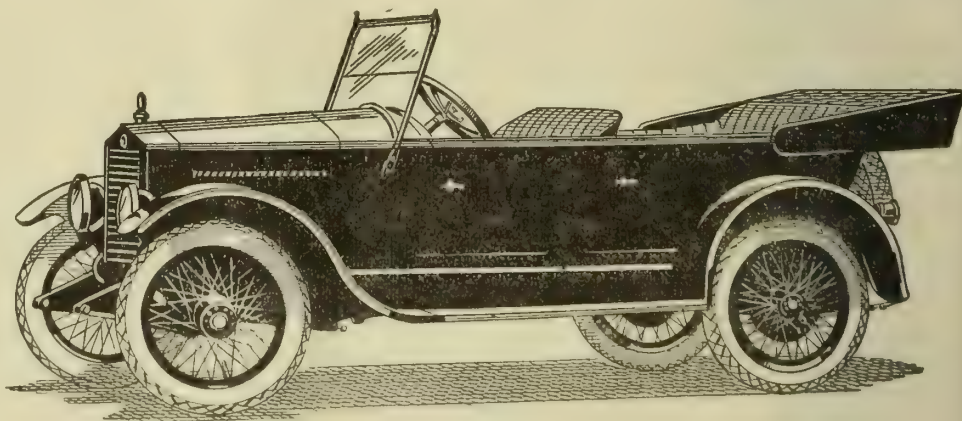
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STUD STOCK SUPPLEMENT.



CE TO STUD STOCK ADVERTISERS

It is our rule to publish "THE PASTORAL REVIEW" on the 16th of the month, it is necessary that all alterations for the Stud Stock Advertisements must be in the printers' hands not later than the 6th of each month.

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**Special Stud Ram, "Progress" (4 years) by "Perfection 1—Miss Togo.
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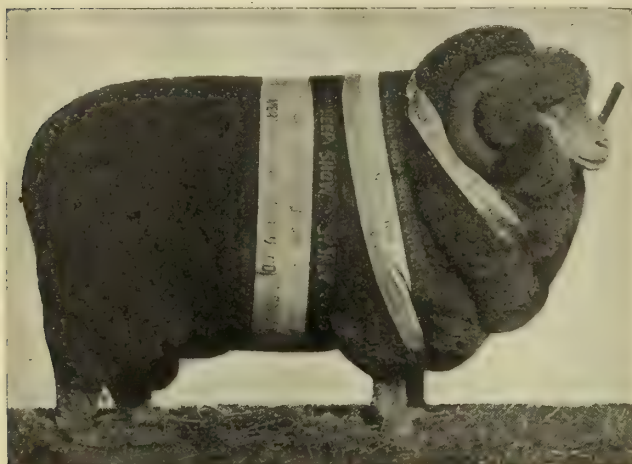
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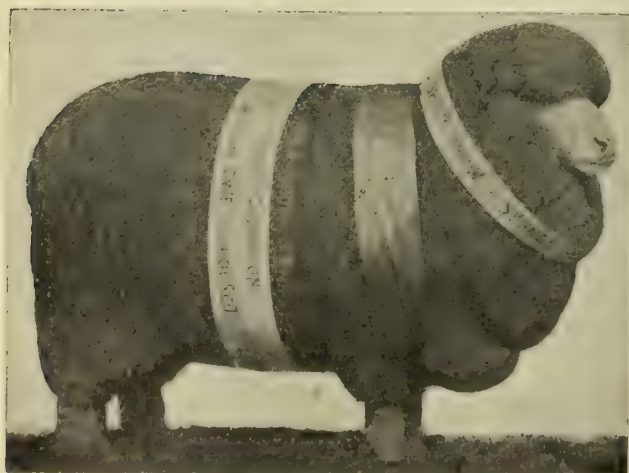
"Dinkum," Aged 2 years and 2 months. Grand Champion Strong Wool Merino Ram (Unhoused) Sheepbreeders' Show, Sydney, July 1920.



"Broad Charles," Grand Champion Merino Ram (Unhoused) at N.S.W. Sheepbreeders' Show, Sydney, July 1919.



3 Champion Ewes. 1½ years (unhoused) Sheepbreeders' Show, Sydney, 1920.
Left to right—Reserve Champion, Grand Champion, Champion Strong Wool.



Grand Champion Merino Ewe (Unhoused) at N.S.W. Sheepbreeders' Show, Sydney, July 1919.



Grand Champion Merino Ewe, 1½ years (Unhoused) Sheepbreeders' Show, Sydney, July 1920

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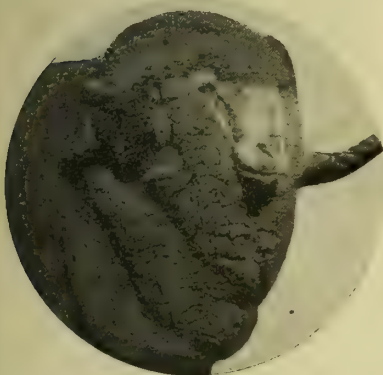


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"PRINCE CHARLIE," 3½ years. Cost 3000 guineas. Leased to a leading South Australian Stud for one month for 1000 guineas, being probably a world's record. Sire "Lord Charles," sold for 2000 guineas, and the grand sire "Sir Charles," sold for 1000 gns.



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Group of eleven Ewes. Cost 100 guineas each.



Typical Flock Rams. Used to breed Flock Sale Rams.



"NONSUCH," Mallett Stud Ewe, for which an offer of 200 guineas has been made and refused.



"ADDITION," 2 years, by "Dandle Dinmont." Purchased for 1200 guineas.



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Rams
for Sale.



"DESTINY"—Sold to Mr. A. Luckoff, Graf Reinet, S.A., for 1,600 gns., July, 1919.



Special Stud Ram "HERO," bought by Mr. W. J. McCarthy for Mr. F. W. Southey, S.A., for 1,600 gns., August, 1919.



"LOYALTY," 3 years. Sold Nov., 1919, to Messrs. J. & A. Hay, The Glen, Harrowgate, for 2,100 gns. Shorn Aug. 8th, 1919, photographed April 5th, 1920, therefore carrying 8 months' wool when this picture was taken.



"MARSHAL FOCH"—2½ years. Special Stud Ram, pure Peppin blood, cut 33½ lbs. wool. Sold to Mr. Paul J. du Plessis, for 1,200 gns.



"DANDIE AGAIN," 5 years. Sold to Mr. Maurice Collins of Hallett, for use in conjunction with his 3,000 gns. Ram, "Prince Charlie."

The above are pictures of some of the high-priced Sheep sold by us during Season 1919. Amongst the successful breeders who have purchased Rams from Lucernedale are the Wanganella Proprietors, N.S.W.

For particulars apply—

Henry Collins & Co., Lucernedale, Mt. Bryan, South Australia.

PHONE—3 Mt. Bryan.

TELEGRAMS—Mt. Bryan.

MOUNT CRAWFORD MURRAY MERINO STUD



CHAMPION RAM LION II.

Grazed at large on Naturalised Grasses only and not Lucerne
Bred by and the property of ALICK J. MURRAY, Mount Crawford, South Australia.

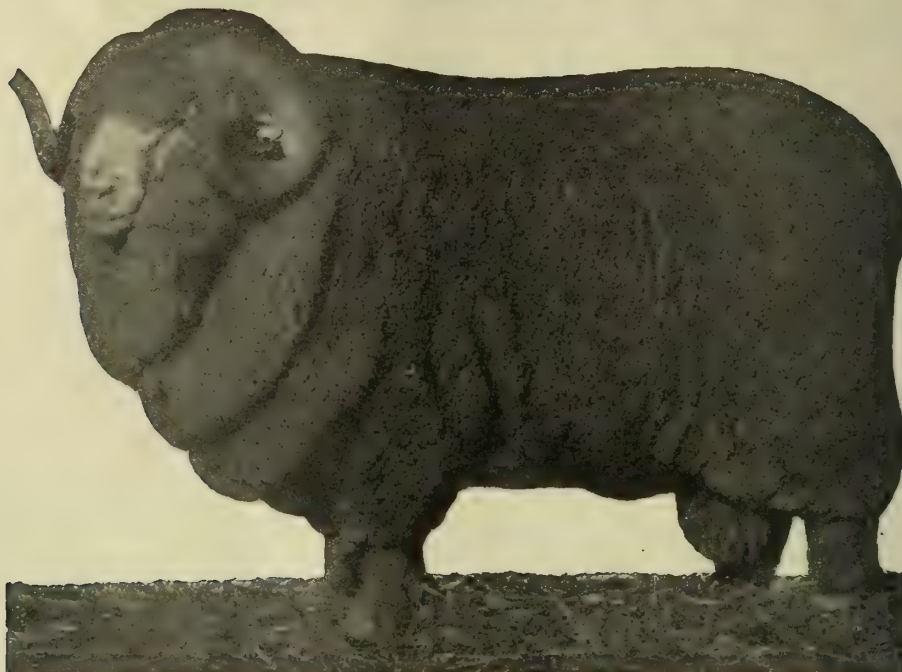
— THE MURRAY MERINO FLOCK —
was founded by the late JOHN MURRAY in 1843.

MURRAY Merinos have been INBRED for seventy-one years, and are famous throughout Australia,
New Zealand, and South Africa for their robust constitution, large symmetrical frames,
and heavy fleeces of profitable wool.

FULL PARTICULARS CAN BE OBTAINED FROM—
ALICK J. MURRAY, Mt. Crawford, South Australia.

Rhine Park —and— Cappeedee

MURRAY MERINO STUDS.

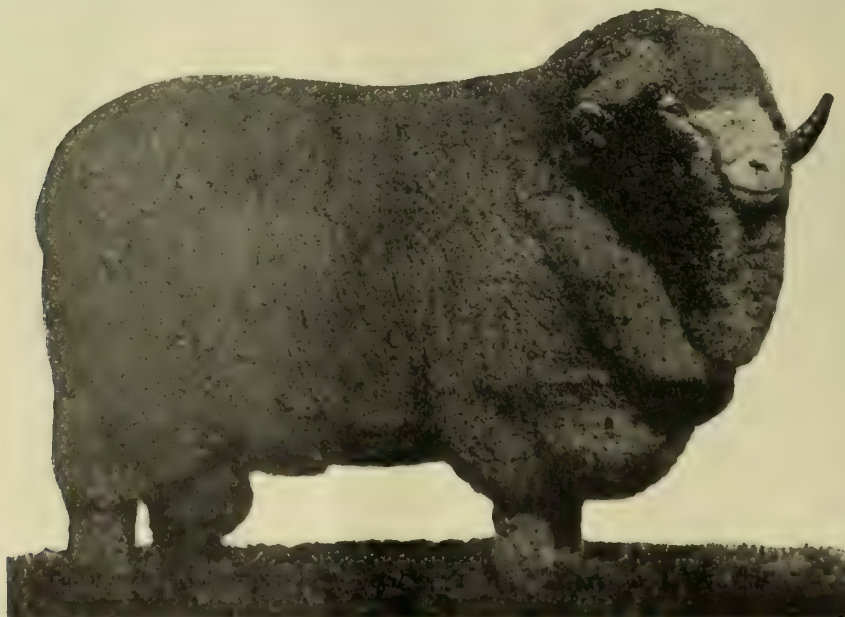


RHINE PARK RAM.

Champion at Adelaide, 1913. 3 years old. Cut fleece 29½ lbs.

THE MURRAY MERINO FLOCK was founded by the late **JOHN MURRAY** in 1843.

The **MURRAY MERINOS** have been **INBRED** for seventy-one years, and are famous throughout Australia, New Zealand, and South Africa for their robust constitution, large symmetrical frames, and heavy fleeces of profitable wool. These Sheep are grazed at large on naturalised grasses only.



2 YEAR OLD CAPPEEDEE STUD RAM, HAIG.

For full particulars apply

MURRAY BROS., Rhine Park, Eden Valley, South Australia
and
WALTER S. MURRAY, Cappeedee, Hallett, South Australia

KOO-OOWIE STUD MERINUS

The property of THOS. SANDLAND, Koo-owie, South Australia.

Stud and
Flock
Rams
for Sale.



Stud and
Flock
Rams
for Sale.

Leading Sire "BEATTY."

These sheep have been bred for 30 years in a 15 inch rainfall and are noted for their high cutting value per fleece of long, bold combing wool and carry valuable fleeces into age. Plain bodied, big sheep and great movers.

For particulars apply to—

K. Chester Sandland, Koo-owie, Kooringa, South Australia.

CANOWIE STUD

The Stud was established in 1857. Rambouillet Foundation.



Sires Used
have cut
up to
37 lbs.



Stud Ewes
mated
have cut over
25 lbs.



Don Cronge, an Exhibition Ram (by Cronje). Offering Progeny 1920.

STUD AND FLOCK RAMS FOR SALE.

Flock Rams, 4 & 6 guineas. Selected Flock, 10 guineas. Stud Rams, 25 to 75 guineas. Special Studs from 100 guineas upwards.

For particulars apply—

A. G. RYMILL, Managing Director, or A. J. McDonald, Manager, Canowie.

14 Alma Chambers, Adelaide.

Cables—RYMILL, Adelaide.

Hallett, South Australia.

ROSEBANK MERINOS

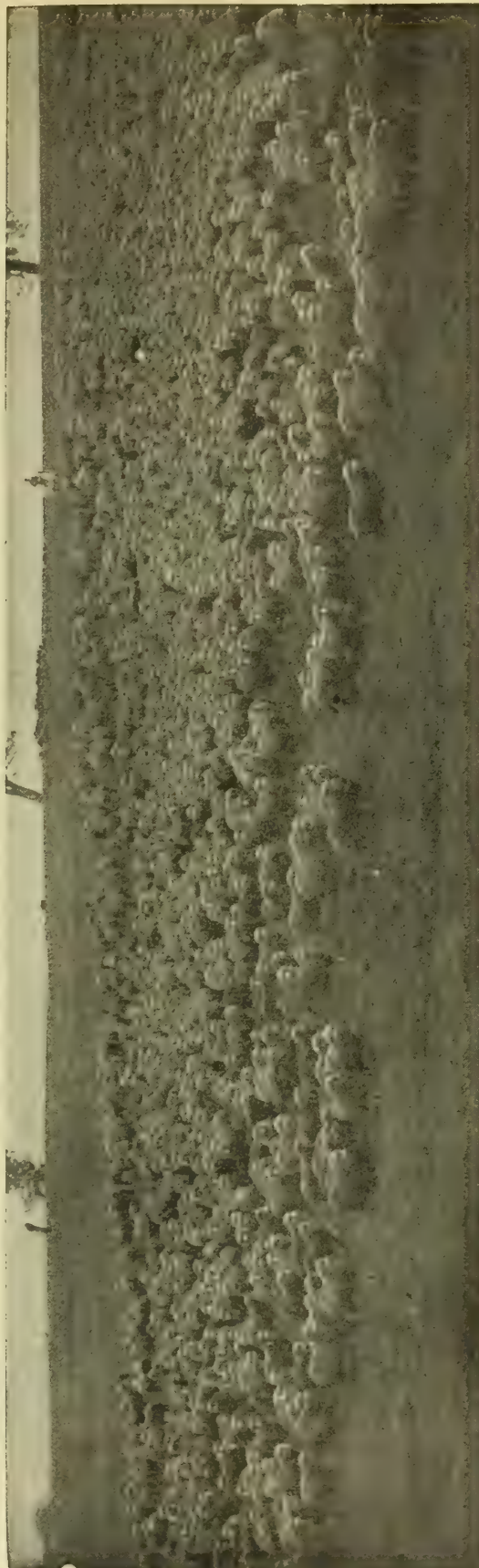
SOUTH AUSTRALIA

All Melrose Sheep are grazed on natural pastures only.



*1½ Year-Old Ewes
Cut 22½, 21, 20, 18½ lbs. of Wool, 1917.
Bred by and the property of G. R. and A. Melrose, "Rosebank," Mt. Pleasant.*

Rosebank secured Champion for Ewe at the Adelaide Royal Show three years in succession, 1910 to 1912. Awarded to different sheep by three different judges. Also secured the whole of the First Prizes offered by the Society for Ewes in 1912.



6,700 Hoggets travelling to shearing shed, 1917. Averaged 11 lbs. 5 ozs. under 12 months' growth.

G. R. & A. MELROSE, "Rosebank," Mount Pleasant, S. Aust.

THE KOONOOONA STUD

Large framed,
bold woolled,
grass fed, pure
Australian
Merinos.
Founded in
1863.
Quotations
given for stud,
selected and
flock rams

Apply :—
Koonooona
Proprietors,
Cowra
Chambers,
Adelaide ;
or
W. G. HAWKES
Manager,
Koonooona,
Burra, S.A.



Special Stud Ram, "LORD KITCHENER," 3½ Years Old, by "Rajah." Cut 33 lbs. Wool.

THE KOONOOONA STUD.

Burra, South Australia.

Burrawang Merinos

Estate of the Late C. Hedley Edols.

The Stud is classed by Mr. W. O'Brien, of Mumblebone.



¶ Since 1880 the Burrawang Flock has been maintained solely from Wanganella blood. In that year six very high-class rams were purchased from Austin and Millear. One of these, "Old Bestwool," laid the foundation, and created the present high reputation of the flock. At the same time 700 2-tooth rams were purchased from the same source, nearly all of "Premier" and "Warrior" strains, considered two of the best rams on Wanganella. In 1887 two more high-class stud rams were purchased from Wanganella; since then no other purchases have been made until 1918, when a high-class Murgha ram was purchased at a cost of 1000 guineas. Although the country has altered the type somewhat, the sheep are as strong in constitution as the Wanganellas in their home in Riverina.

¶ The Burrawang wool retains its excellent name with buyers, and is always in demand at a satisfactory range of prices.

¶ The grown sheep, comprised chiefly of breeding ewes (no wethers), averaged 12 lbs. 8 ozs. of wool 1916 clip.

For Stud or Flock Rams apply to—

The Manager, Burrawang, Yarrabandai, N.S.W.

or to

The Executors of the Late C. H. EDOLS,

c/o Perpetual Trustee Company (Limited), 33-39 HUNTER STREET, SYDNEY

H. E. KATER & SON'S EGELABRA STUD, WARREN N.S.W.



EGELABRA TWO-TOOTH STUD RAM.

The Egelabra Stud is a portion of the Mumblebone Stud, and was acquired by the present owners by the subdivision of Mumblebone in 1906. The stud was founded in 1879 by H. E. and E. H. Kater, who purchased rams and ewes from the late Hon. John Smith, of Gamboola, Molong. Since that date no fresh blood has been introduced into the flock. Mr. Smith was a noted breeder. His flock was founded about 1840 from Marsden's flock of Spanish Merinos and Negrettis, specially imported from Spain. Thus it is claimed that the Egelabra Stud has maintained for 78 years that purity of blood which is so important.

The sheep are noted for large frames, plain bodies, splendid fleeces, long staple, and magnificent constitutions. At a recent shearing the Egelabra sheep, consisting mainly of breeding ewes, cut 14 lbs. 4 ozs. of wool.

For particulars of Sale Rams apply to—

The Manager, Egelabra, Sandy Creek, Warren, N.S.W.

MUMBLEBONE STUD

Bred on Western
(N.S.W.) Salt
Bush Country.
Noted for their
robust constitution,
large frames, and
splendid fleeces of
long, strong staple.



Special Stud Ram No. 319.

For particulars sale rams apply—

KATER BROTHERS, Mumblebone, Warren, N.S.W.

Established
1879.

The WANGANELLA STUD



SPECIAL STUD RAM 17.2

Sold by Auction at the Sydney Sales, July, 1920, to Mr. Maurice Collins, of Mallett, S.A., for 700 gns. thereby obtaining the highest price at auction during the sales for two successive years by the Wanganella rams.

STUD & FLOCK RAMS FOR SALE.

For particulars apply

The Manager **AUSTIN WANGANELLA CO. LTD.**, Wanganella, Deniliquin, N.S.W.

DALKEITH MERINOS

PLAIN BODIED

PURELY GRASS-FED

BOONKE BLOOD



SIR ALICK

STUD AND FLOCK RAMS FOR SALE.

Trucking Stations—Mudgee, Merriwa, or Craboon. Rams will be delivered on trucks to suit buyer's convenience.

F. D. McMASTER, DALKEITH, CASSILIS, N.S.W.

Amongst the sires used are Australia Day, Comedy King, General Grant, Young Comedy King, Young Australia, and numerous other high-class Boonoke Stud Rams. Additions made to the stud in 1918 were as follows:—10 Boonoke blood special stud ewes at 110 guineas, which took second prize Sydney Show, 1918, and 1 ditto Grand Champion at same Show at 150 guineas, all purchased from Goldsbrough, Mort & Co. Ltd., Canonbar Station; 10 special stud pure Boonoke ewes at 100 guineas each, from F. S. Falkner & Sons Ltd.

The stud is under the personal supervision of Mr. F. D. McMaster, and was classed by the late Mr. J. C. Darke. The work in the future will be done by Mr. W. J. McCarthy.

Sir Alick, a son of Australia Day, took first prize for ram under 2 years at the Sydney Show, 1919. In 1920 he took Reserve Grand Champion and first prize and was sold to the Wabondongah Pastoral Company for 400 guineas.

VICTORIA DOWNS STUD

MORVEN ————— QUEENSLAND.

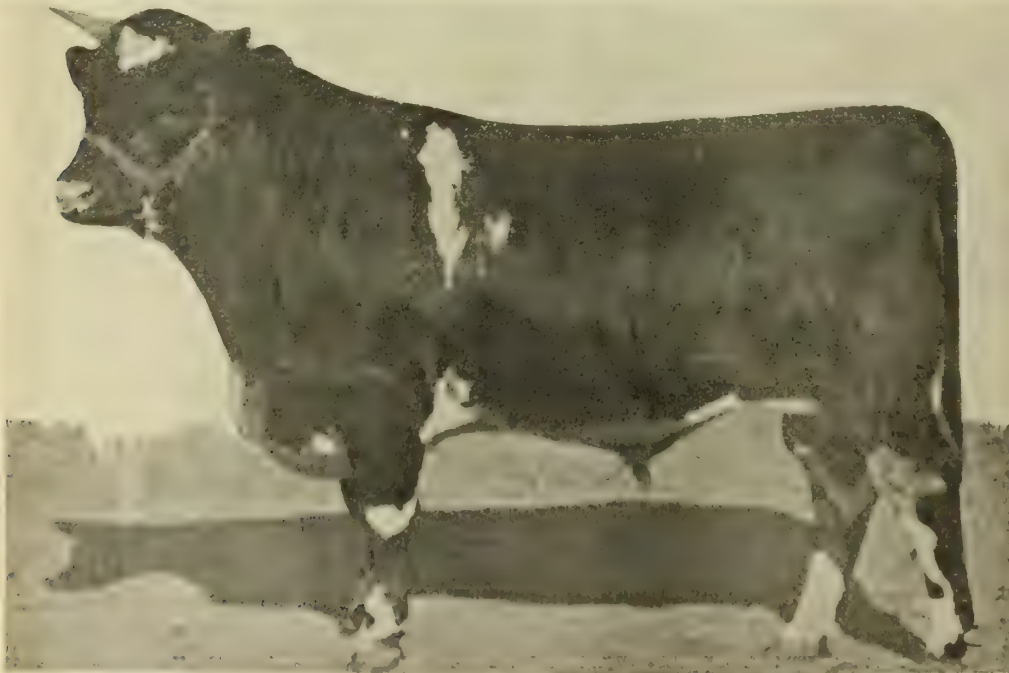
A
Queensland
Stud
of
pure Peppin
Wanganella
Blood.



Stud Park No. 10. Purchased by Lord Bros. from Thomas Millear for 2500 gns.

The VICTORIA DOWNS MERINOS are pure Wanganella blood, being founded on rams purchased from Deniliquin Stud Park and Wanganella Estate, New South Wales, at high prices; the ewes were bought from the former property. Bred on the downs of Western Queensland, the Victoria Downs Sheep are noted for their exceptional constitutions and grow a fleece of very dense medium combing wool, of good length and abundant character.

Cattle—both sires and dams—chiefly Derrimuts, together with a number of imported females 41 pedigree females costing from 100 to 515 gns, and averaging 188 gns., also 34 other pedigree cows and heifers averaging 60 gns. All Herd Book registered.



Clifton Cherry Colonel, 1 year 7 months. Purchased from A. J. Simpson for 1000 gns.

Foundation of both sheep and cattle studs made by the purchase of the very best animals, male and female, obtainable.

For full particulars, apply to—

LORD BROS., Victoria Downs, Morven, Q'land.

Flock and Stud Rams for Sale.

Flock, 4, 6 and 8 gns.
Selected, 10 and 12 gns.
Studs from 15 gns
upwards.

Stud and Herd Bulls for Sale.

Young Herd Bulls from
20 gns. upwards.
Young Pedigree Bulls
from 40 gns. upwards.

Deniliquin Stud Park North Stud

(PURE WANGANELLA BLOOD.)

The Property of THOMAS MILLEAR.



"DONALD DINNIE"

Bred and Sold by THOMAS MILLEAR, Deniliquin Stud Park Stud, N.S.W., through Messrs. Herbert Power and Son, to the proprietors of the CANOWIE ESTATE, South Australia. Price, 1200 Guineas.

The above photo was taken at Canowie in 1908.

Since 1906 "Donald Dinnie" has sired 1056 lambs, and an immense sum has been received by the owners for his surplus progeny. His fleece has averaged 32 lbs. for the past 10 years, and now 1915, at 12 years old, he has cut 31½ lbs. of bright, lustrous wool.

Among the rams sold have been—"Donald Dinnie" (photo above), in 1906, for 1200 gns.; "Sir William," in 1909, for 1350 gns.; "Stud Park No. 10," in 1918, for 2500 gns., this latter being a world's record for a 6-year-old pure Peppin Rambouillet.

This Stud was formed in 1892 by the father of the present owner (then managing partner in Wanganella), and the classing since 1898 has been done by the owner in conjunction with his Manager, who is now in his 24th year of service.

In June, 1919, Mr. Millear transferred his Deniliquin Stud Park property, with about 4000 stud sheep, being absolutely fair samples in each grade of the 20,000 owned by him, to his son, Thomas Millear, jun., retaining for himself the property Stud Park North, Jerilderie, N.S.W., which has been worked for many years past in conjunction with Stud Park, Deniliquin. During his son's absence from Australia Mr. Millear will carry on this latter property in the former's interests.

N.B.—The sale of Wanganella Estate by the Exors. of late Thomas Millear (of which Mr. Millear was a Trustee) does not affect the Stud Park North business, as no sheep from Stud Park North were parted with, nor did Mr. Millear acquire any from Wanganella Estate for Stud Park North, excepting prior to the sale of the Estate.

INQUIRIES FOR STOCK SHOULD BE ADDRESSED TO

THOMAS MILLEAR, Edgarley, Willaura, Victoria,

or to the MANAGER, STUD PARK NORTH, JERILDERIE, N.S.W.

HADDON RIG MERINO STUD

Pure Wanganella Rambouillet.



Haddon Rig 2-Year-old Ram, "Royal Dandie," sold to A. G. Michaelian for South Africa for 1500 guineas

A few rams of "record" quality at "reasonable" prices available each year.

FRANC B. S. FALKINER, Owner, Late Managing Director of F. S. Falkiner & Sons Ltd., 30 years Riverina experience in breeding and active station management.

Inquiries to **HADDON RIG, WARREN, NEW SOUTH WALES.**

THE BUNDEMAR STUD

Inquiries
for
Stud
and
Flock
Rams
to
The Manager
BUNDEMAR
TRANGIE,
N.S.W.



**BONNIE
CHARLIE**

Sire:
Prince
Charlie
Grand Sire:
Lord Charles
G.G. Sire:
Sir Charles

BONNIE CHARLIE.

Bred by Estate late F. E. Body, Bundemar, Trangie, N.S.W. Born Nov. 1st, 1918.
Sold June 16th, 1920, to Messrs. Vermaak Bros., Stockdale, Stormberg Junction, C.P., South Africa, for Three Thousand Six Hundred Guineaes.
Also bred in the Bundemar Stud {
Prince Charlie Sold to M. Collins for 3000 guineas in 1918
Lord Charles H. Collins & Co. for 2000 guineas in 1915
Sir Charles D. & W. Gibb for £1000 in 1910
2-tooth Ewe, No. C 692 C. Meyer, Edenburgh, S. Af., for £250 in 1920

THE WILLANDRA STUD

Property of The Willandra Pastoral Co. Ltd.

Pure Wanganella Blood.

The Willandra sheep are bred in a 14" rainfall and are entirely grass fed, possessing strong constitutions, plain bodies, with good heads and necks (which is a distinct advantage where the fly is troublesome), and long

dense fleeces of robust wool. The Willandra sheep produce a fine type of wethers, with exceptionally large frames, plain bodies, well proportioned, and most suitable carcasses for export, while at shearing yield heavy fleeces of attractive wool.



WILLANDRA STUD RAM.

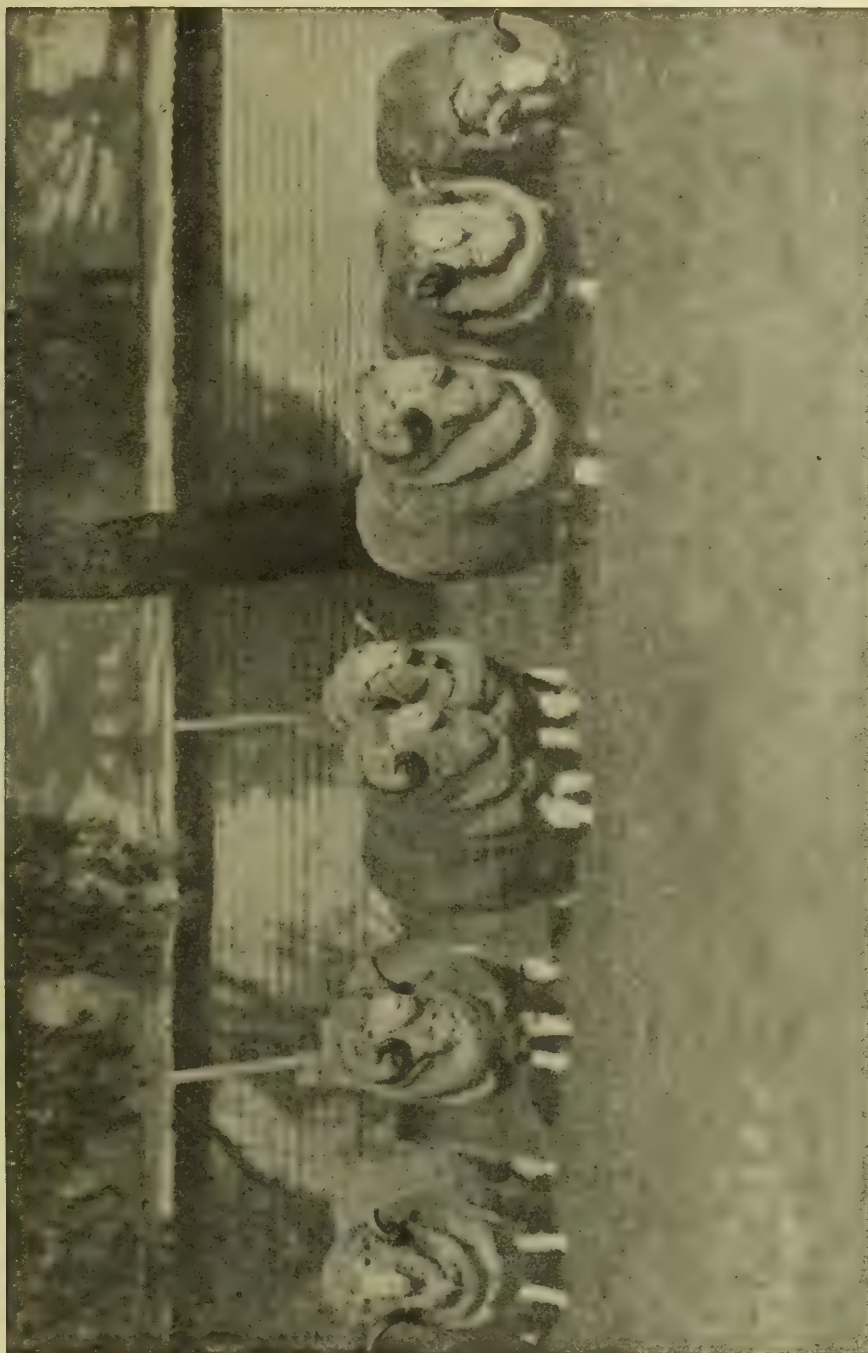
Stud Rams cut up to 35 lbs. Stud Ewes cut up to 25 lbs. Flock and Stud Rams for Sale.

For particulars apply to—The Manager, Willandra Station, Booligal.

Telegrams: Hillston. Cable Address: Acumen Sydney. A.B.C. Code, 5th Edition.

The UARDRY Stud.

PURE PEPPIN BLOOD.



Group of Seven Rams sold at Auction, Sydney, July 1918, Averaged £319 10/-

Stud and Flock Rams for Sale.

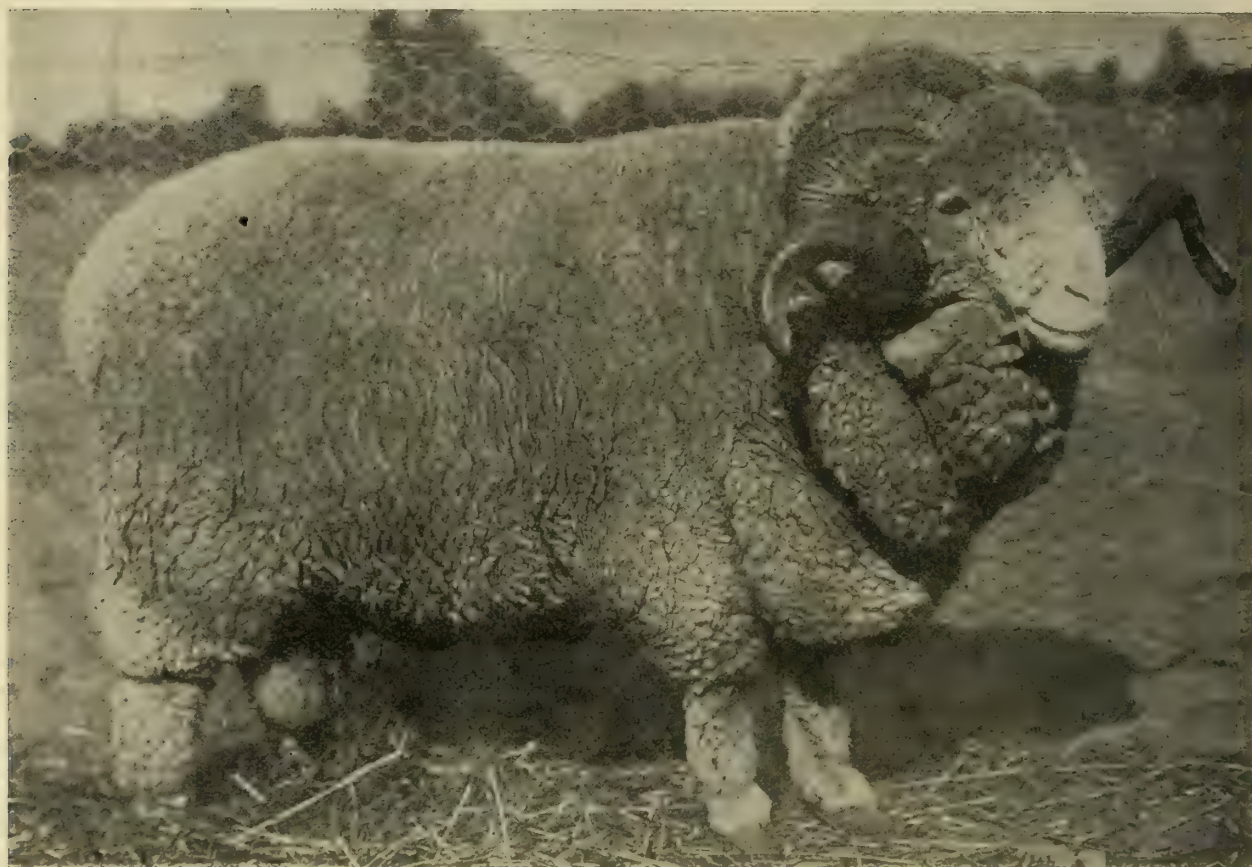
Enquiries should be addressed to:—

Charles Mills (Uardry) Limited, UARDRY, Hay, N.S.W.

Telegrams to "MILLS, Uardry, Carrathool."

WANGANELLA ESTATE STUD

Property of F. S. FALKINER & SONS Ltd.



No. 955.—OPTIMIST. 3 years old.

Sold to Dr. G. E. Goddard for 1750 guineas.

Property of F. S. Falkiner & Sons Ltd., Wanganella Estate, Conargo, N.S.W.

Large frames, plain bodies, robust wool of pronounced character, good length and colour. Numerous letters of appreciation from buyers throughout the Commonwealth and South Africa.

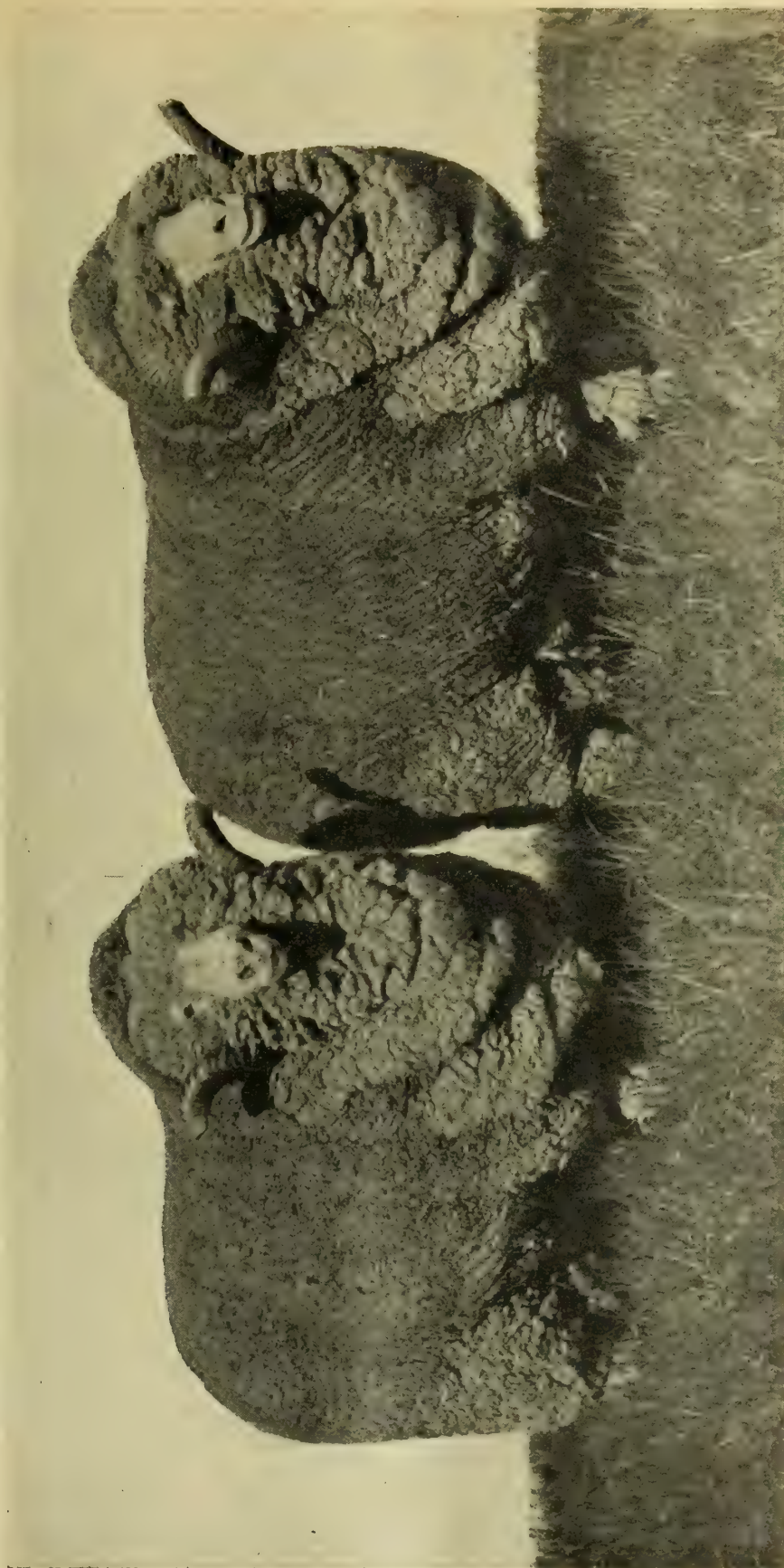
THIS STUD was formed by Messrs. Peppin & Sons in 1861, and purchased with the Station by Messrs. Austin & Milliar in 1878. This partnership terminated in 1894—Mr. Milliar then taking over his half of the property and stock, which he named **Wanganella Estate**, and conducted till his death in 1895. The Trustees carried on the business until August, 1910, when they sold the property, the whole of the pure bred **WANGANELLA ESTATE Stud Flock**, and the **GOODWILL** of the business to **F. S. FALKINER & SONS LTD.**

FLOCK and STUD RAMS for SALE, for particulars apply—

F.S.FALKINER & SONS LTD., Wanganella Estate, CONARGO, N.S.W.

BURNIMA MELKINO FLOCK

A combination of the famous Murray and Koonoona blood of South Australia. Large-framed, plain-bodied sheep, cutting heavy fleeces of high-class wool. Pure Australian Merinos bred on sound lines. These sheep have given satisfaction wherever used.



4-tooth Stud Rams.—Two of the Leading Sires.

STUD AND FLOCK RAMS FOR SALE.

Apply to the MANAGER, BURNIMA, BIBBENLUKE, NEW SOUTH WALES.

Zara Merino Stud



Zara Stud Ram

**Stud
and
Flock
Rams
for
Sale**



Group of Zara Stud Rams

**Estate late
WILLIAM OFFICER—ZARA—WANGANELLA
New South Wales**

Boonoke Stud Merino Sheep.



A leading Boonoke Sire. Photo taken at 6 years old.

Bred by F. S. FALKINER & SONS LTD., Boonoke, Conargo, N.S.W.

Inquiries for Stock should be addressed to—

F. S. FALKINER & SONS Ltd., Boonoke, Conargo, N.S.W.
or Boonoke North, Widgiewa Siding, N.S.W.

CASSILIS MERINO STUD



The sheep are large-framed, plain-bodied and carry fleeces of high quality, density and character.

These rams have been very successful in Central Queensland.

The flock has been classed for many years by the late J. C. Darke, and is now being classed by W. J. McCarthy.

Particulars on application from:—

**THE MANAGER, CASSILIS STATION, CASSILIS, N.S.W.
or DALGETY & CO. LTD., SYDNEY.**



The Property of A. BUSBY.

The Cassilis flock was founded by the late A. Busby in 1829. Great care was taken in procuring the best rams then available. In the fifties, "first choice" rams were secured from Havilah. These were continued until 1868, when a very high class stud ram was brought there. Since then, the flock has been bred within itself.

BARRATTA MERINO STUD.

PURE PEPPIN BLOOD.

Property of the Australian, Mercantile, Land and Finance Co. Ltd.



BARRATTA-BRED EWE AND RAMS.

- 1) Champion Hand-fed or Grass-fed Strong Wool Fwe. (2) Reserve Champion Hand-fed or Grass-fed Strong Wool Ram.
(3) Champion Hand-fed or Grass-fed Strong Wool Ram.

AUSTRALIAN SHEEPBREEDERS' SHOW, 1918.

For particulars apply

**The Manager—Barratta, Deniliquin, N.S.W.,
or to**

**AUSTRALIAN, MERCANTILE, LAND & FINANCE CO. LTD.,
Sydney—Melbourne—Brisbane.**

This stud was commenced by the Company in the year 1893 on another property by the purchase of high-class stud ewes and rams from Messrs. Austin & Millar, Wanganella, and since then from time to time purchases have been made from Wanganella, Wanganella Estate Stud Park Deniliquin, Murgha and Haddon Rig.

**STUD and
FLOCK RAMS
FOR SALE.**

Mendip Hills Merinos and Halfbreeds

FLOCK ESTABLISHED 50 YEARS.

The Mendip Merinos gained Champion Ram and Ewe at Christchurch Show in 1903-4-5-6, and again in 1915 and 1916. Mendip Halfbreeds have won the "Liston" Cup Competition for Corriedales and Halfbreeds, competing together three times since its inception in 1911.



**Stud
Rams
cut
up to
34 lbs.
Wool.**

**Stud
Ewes
cut
up to
23 lbs.
Wool.**

Champion, Reserve Champion, and 3rd Prize Rams, Christchurch Show.
Average Weight of Fleeces, 27½ lbs.

For particulars apply—

NORMAN RUTHERFORD, Mendip Hills, or G. L. RUTHERFORD, "Connemara," Parnassus, N.Z.

Brucedale & Curranyalpa Merino Stud Flocks

Brucedale Stud, established 1850. Now consists of Peppin blood ewes bred at Curranyalpa, rams in use from Bundemar, Uardry, Boonoke, and Urangeline.

For particulars apply to—

H. C. SUTTOR,
Brucedale, Peel,
New South Wales.



Curranyalpa Stud, Peppin blood from Boonoke, Bundemar, and Wanganella bred rams and ewes. Rams now in use from Lucernedale, Haddon Rig, and Uardry. Big, strong, hardy, plain body sheep, bred on the dry salt bush plains of the Darling for years.

For particulars apply to

CLAUD H. SUTTOR,
"Mia Mia,"

Purlewaugh, via
Coonabarabran.

Special Stud Ram "DANDY," 4 years old.

Bred at Curranyalpa. Cut 31 lbs. wool hand shorn, September, 1920, 12 months' growth.

THE

South Wangamong Stud Merino Flock

Property of CHAS. D. SANGER



4-tooth Selected Flock Sale Rams.

Stud Flock founded in 1853. In 1863 ten Wanganella Stud Rams (the pick of their celebrated imported pure Rambouillet sire, Emperor's Get) were successfully introduced. Since then no other strain has been introduced into the Stud.

Average of all grown sheep (75 per cent. lambing ewes), 12 lbs. 13 ozs.

The 1915 Clip sold in Melbourne to 18½d., and Pieces to 15½d. in grease.

" 1916	"	"	"	22½d.,	"	"	19½d. "	"
" 1917	"	"	"	25 d.,	"	"	21½d. "	"

For particulars of Flock and Stud Rams apply to—

CHAS. D. SANGER, South Wangamong, Corowa, New South Wales.

"LAMARA" STUD MERINOS

BREEDING.

This Stud is a portion of the "Collinsville" Stud Flock, which has been subdivided.



STUD RAM No. 28 (2½ years.) Sire, "Lord Charles."



"SILVER CHARLES."
Sire "Lord Charles (cost 2000 guineas.)

For further particulars apply to—

H. MELVIN COLLINS

"Lamara," Booborowie, Burra, Sth. Aust.

Wires: "Lamara," Booborowie, S.A.

Telephone: No. 2, Booborowie.

The Springfield Pure Merino Stud

Goulburn

New South Wales.

**Founded in 1838 by the late W. P. FAITHFULL.
Bred since 1871 by A. LUCIAN FAITHFULL.**

These sheep are noted for their very high cutting value per fleece. Also for their hardy, strong constitutions, doing well in any climate, and growing to a great size.

The A. A. D. Pomeroy wool, bred by A. A. Dalglish from Springfield bred rams and out of ewes by Springfield bred rams for the last **ten** years, **topped** the Sydney market for greasy wool. In 1917, **40** bales realised **29d.** and **44** bales, **29½d.**

This year (1918) same A. A. D. Pomeroy wool has realised **30d.** per lb.

This year (1919) wool the progeny of Springfield bred ram again **topped** Sydney market, viz. **Lerida 30½d.**



ADMIRAL.

Bred by A. Lucian Faithfull. Weight of fleece, 29 lbs. 4 ozs. 12 months 3 days growth. Length of Staple, 4½ inches.

For further particulars apply to—

**A. LUCIAN FAITHFULL,
Springfield, GOULBURN, N.S.W.**

TELEGRAPH AND TELEPHONE ON.



30 Special Stud Ewes, bred by A. Lucian Faithfull.
Typical style of Springfield Merinos.

Average weight of Fleeces, 12 months' growth, unhoused, 18 lbs. 4½ ozs.

THE GUMS MERINOS

Large Frames—Strong Constitutions—Long Staple—Bold Fleeces



Special Stud Ram, 2½ Years Old.



Three 1½ Years Old Stud Ewes. Cut 18, 19 and 20 lbs. Wool respectively.

Founded on Murray, Koonoona and Canowie blood, the Stud is true to the pure South Australian type. Bred on saltbush country and without any pampering the sheep will stand up to the hardest conditions.

The Property of

THOMAS H. PEARSE & SONS,

The Gums—Florietown—S. Aust.

Phone—58 Kooringa

Apply—The Manager, The Gums.

Goolgumbla Stud Merinos

The property of
Mr. GEORGE STUART.

**Pure Peppin strain,
large frames,
strong constitution,
long staple.**

All the ewes in the Goolgumbla
Stud are by pure Wanganella,
Haddon Rig, and Boonoke rams
from ewes of the same blood.

For particulars apply—

**The Manager
GOOLGUMBLA,
Jerilderie,
N.S.W.**



Goolgumbla Stud Ram.

COBRAN

PURE PEPPIN BLOOD.

DENILQUIN, NEW SOUTH WALES

"COBRAN" for the
past 30 years at least
has been the premier
wool clip of Riverina,
and has with very few
exceptions topped the
market during that
period.



COBRAN 4-tooth Ram. Length of staple, 5 inches.

For full particulars apply

**C. H. BESLEY, The Olderfleet, Melbourne, Vic., or
The Manager, COBRAN, Deniliquin, N.S.W.**

The "COBRAN"
wool is noted for its
robustness, great length
of staple, excellence of
character and high
yield; the sheep are
big framed, plain
bodied, heavy cutters,
very even in type, and
have been bred on
these lines since its
inception.

WIRRA WIRRA STUD MERINOS

At MT. CRAWFORD, SOUTH AUSTRALIA.



WIRRA WIRRA, 5½ years old Stud Ram, No. 300.



Grazed at large on natural
grasses only.

Bred by and the Property
of MURRAY DAWSON,
Wirra Wirra, S.A.



MURRAY DAWSON, WIRRA WIRRA, Mt. CRAWFORD,
SOUTH AUSTRALIA.

MERRIBEE STUD FLOCK (Late Bull Plain.)

MAINLY MURRAY Blood.

— Established 24 Years.



Extra Large Frames.

Heavy Fleeces of long, strong, combing Wool.

All MERRIBEE grown sheep this season (1914) averaged 13 lbs. 3 oss. wool with barely 12 months' growth—Lambs averaging 5½ months old out 5 lbs. 2 oss.

ORDERS BOOKED FOR RAMS.

Particulars on Application.

W. W. KILLEN, Merribee, Barellan, N.S.W.

Telegrams—Barellan (thence Telephone.)

WARRAH MERINOS

The Property of
The A.A. Co.

The Warrah Sheep are plain bodied, large framed and carry heavy fleeces.

For particulars apply THE MANAGER, WARRAH STATION, Willow Tree, N.S.W.



Stud Rams sent to Melbourne Ram Sales, 1918.

MULWALA STUD MERINO FLOCK

FOUNDED 1863.

The flock has always been bred on the same lines.
Under management of James Sloane since 1877.

For particulars apply:—

James Sloane & Son,

Mulwala Station, Mulwala; or Wood Park, Jerilderie,
N.S.W.

THE GUNDARY PLAINS MERINO STUD



STUD RAM JUPITER.

The Gundry Plains Stud Ewes were originally purchased from the stud flocks of Messrs. Litchfield, Cooma, and A. Lucian Faithfull, of Goulburn. Stud Rams were purchased from the above flocks, and from Boonoke, to mate with the above ewes. The aim of the flock has been to produce a robust, plain-bodied, strong-wool sheep, and they are noted for their heavy fleeces of strong combing wool.

For further particulars apply to—

A. R. MAPLE-BROWN,

Gundry Plains, Goulburn, N.S.W.

NALPA STUD MERINOS

E. C. & J. L. STIRLING, South Australia.

The flock is one of the oldest established in the State, and a noted prizetaker in both **SHEEP and WOOL.**

NALPA secured all champion prizes for Merino wool as allotted Royal Show, Adelaide, 1914 to 1918. Also first and special prizes for two best rams' fleece, Melbourne Royal, 1919.

STUD AND FLOCK RAMS FOR SALE.

Apply to **Manager, Nalpa Langhorne's Creek, South Australia**

Telegrams: Fullarton, Wellington, E.



No. 4-1 Double Reserved Champion, Australian Sheep Breeders' Association, Melbourne, 1917. Sold to Geo. Seiberhagen, South Africa, for 1000 guineas. Out fleece 34 lbs.

THE CARR'S PLAINS IDEALS

The IDEAL Sheep are finer in the wool than the Crossbred. They have been bred rather towards the Merino, and the fibre is more of the character usually yielded by a Comeback. This accounts for the high price obtainable for the clip, and gives it an unique character. The Carr's Plains Ideals are

AUSTRALIAN BRED SHEEP FIXED TYPES

They cut the same weight of wool as ordinary Merinos and get the same price, but they realise more per head for the whole fleece because they cut much more fleece wool and less skirtings than the Merino; also the carcase is bigger and returns more than Merinos.

For fuller particulars and samples of wool, write to:—

**H. H. WETTENHALL
AND SONS**

Carr's Plains, via Stawell, Vic.

WELLINGTON LODGE STUD South Australia.

Merino Sheep.

Pure bred for 60 years. Founded on Learmonth blood, and later Canowie, Wanganella, and Murray blood.

A few selected and flock 1918 rams for sale.

Shorthorn Cattle.

Pedigree Shorthorns of Angas, Derrimut and imported blood.

A few young bulls and heifers for sale.

Thoroughbred Horses.

Colts and fillies from yearling upwards, by Kerlie and Iownit, usually a few of each for sale.

Apply—

**ALLAN McFARLANE, Wellington Lodge, East Wellington, S.A.,
BENNETT & FISHER, Bowman Buildings, Adelaide.**

WANGAMONG STUD

(See
Alternate Issues)

**Consistent Drought Resisters—66 Years.
One-Man Type Flock.**

SOME (16) CONSTANT BUYERS TO DATE:



370-8/10/18, N.S.W.—“Hot, dry, dusty.”—“Since our Flock was changed from Wangamong, no big percentages, long, shafty wool, or big smooth wethers to sell. They were bought 12 to 15 months in advance.”

532-29/10/17, South Africa.—“I told you of my record price in the grease, 31½d., pieces, 24½d.”—6 years Wangamong.

Hot, Dry, Dusty.	Cold, Wet, Snow.	Temperate	Years Used	Purchasing Years.
			6	1912, 1914, 1916, 1918.
			17	1902, 1904, 1905, 1910, 1913, 1917
			6	1911, 1912, 1914, 1916.
			13	1903, 1904, 1905, 1906, 1908, 1909, 1910, 1911, 191
			6	1913, 1914, 1918, 1919.
			20	899, 1902, 1904, 1905, 1907, 1908, 1909, 1911, 1912, 1913, 1917.
			7	1907, 1909, 1910, 1911, 1912, 1913, 1914.
			7	1912, 1913, 1917.
			16	1904, 1906, 1908, 1909, 1913, 1919.
			25	1894, 1895, 1901, 1907, 1911, 1914, 1916, 1918.
			6	1914, 1916, 1917, 1919.
			15	1904, 1907, 1910, 1913, 1916.
			13	1906, 1907, 1909, 1910, 1911, 1912, 1918.
			10	1908, 1909, 1913, 1916, 1917.
			20	1894, 1901, 1903, 1904, 1-05, 1906, 1909, 1911, 1912, 1913, 1917
			7	1912, 1914, 1916, 1917, 1918.

A remarkable return (verified by 12) letters of approbation, half being since 1912), taking into consideration the many changes of opinion and ownership.

Apply { **W. B. Sanger, Director, or
J. M. Sanger, Manager**

WANGAMONG PASTORAL CO., Daysdale, N.S.W.

THE WHITE ROCK CORRIEDALE STUD FLOCK

THE NEW BREED OF THE NEW CENTURY.

Wool clip equal in value to the best Merino flocks.

Mutton and Lamb the finest quality grown in Canterbury.

Robust constitutions and an up-to-date sheep.

Weight of fleece up to 28 lbs.

Corriedale wool highest price in New Zealand markets.



Corriedale Stud No. 1-18, sold in Sydney July 1920.

Grand Champion Sydney, 1920.

A GREAT COMBINATION OF WOOL AND MUTTON.

Champions International Show, 1906.

Champions, Rams and Ewes, Canterbury Metropolitan Show, 1910.

Champions at Launceston and Hobart Shows, 1910-1911, bred from this flock.

Grand Champion, Sydney, 1920.

Stud Rams and Ewes delivered at any port in the world.

Recent Exportations have been made to all the States in Australia, South Africa, America, British East Africa, all parts of New Zealand, and other places.

Flock Established 1889. Registered N.Z. Flock Book.



Two Corriedale Stud Rams sold in Sydney July 1920.

VARIOUS SHOW RECORDS INCLUDE—

PANAMA EXHIBITION, U.S.A. — Champion and Reserve Champion Rams, Champion Ewe. Also other prizes. Gold and silver medals for wool (fleeces).

SYDNEY SHEEP SHOW, N.S.W. — Grand Champion Rams and Ewes 1915. Many other prizes.

BRISBANE EXHIBITION, Queensland. — Champion Rams and Ewes 1915. All other prizes.

NEW ZEALAND SHOWS. — Champion Ram Ashburton Show, also Stringfellow Memorial Cup. Champion Ram Nelson Show. Champion Ewe Rangiora Show. Many prizes Christchurch Show, including the Corriedale Cup for most valuable combination of wool and mutton, single ram, also the Quibell Cup for best average value three rams. Half-breds competed for this also. Different teams of sheep competed at each of these Shows. Practically all were sold 1915. Reserve Champion and other prizes. Christchurch, 1919.

PROGRESS.

The greatest invention in modern Sheep Farming is the Freezing Industry. The Freezer opens to the Sheep Farmer the Meat Market of the whole world. Before only Wool could reach the World's Markets.

PROGRESS.

To-day it is most profitable to grow sheep which combine the wool value of the Merino and the meat value of the British Breeds.

THE CORRIEDALE REPRESENTS PROGRESS.

FLOCK AND STUD RAMS FOR SALE.

For Particulars apply to

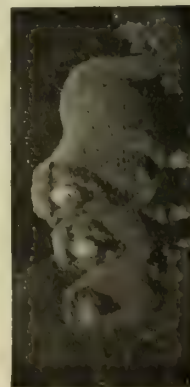
C. H. ENSOR, White Rock, Rangiora, N.Z.

OR TO YOUR AGENTS.

Note the bold appearance denoting constitution.



Note the evenness of type these sheep show.



BUSHEY PARK CORRIEDALES

(Registered).

Foundation: Lincoln—Merino.

This flock was founded by the purchase of over 1000 specially selected studs at the dispersal of Mr. Leonard White's famous flock (No. 9, N.Z.F.B.)

CONSTITUTION.

Note the shape of these sheep. They have robust constitution and large symmetrical frames, as well as heavy fleeces.

WOOL.

The wool is a dense, shafty, true halfbred, and is noted for its excellence of character and length of staple.



PREPOTENCY.

Having been carefully line-bred for many generations, the whole flock shows a strong family likeness and fixity of type. The rams are consequently extremely prepotent, having the power of impressing their characteristics on their progeny.

SHOW YARD RECORD.

The Canterbury Agricultural and Pastoral Show, held annually in Christchurch, is the "Mecca" for Corriedale sheep in New Zealand. For many years Mr. White's sheep have been great prize takers. His latest achievement was the winning of the Championship Gold Medal for Ram, and the Corriedale Cup for most points in rams in 1919.



STUD & FLOCK RAMS FOR SALE.

For particulars apply to

WRIGHT, STEPHENSON & CO. LTD., Stud Stock Salesmen. P.O. Box 462. Dunedin, N.Z.

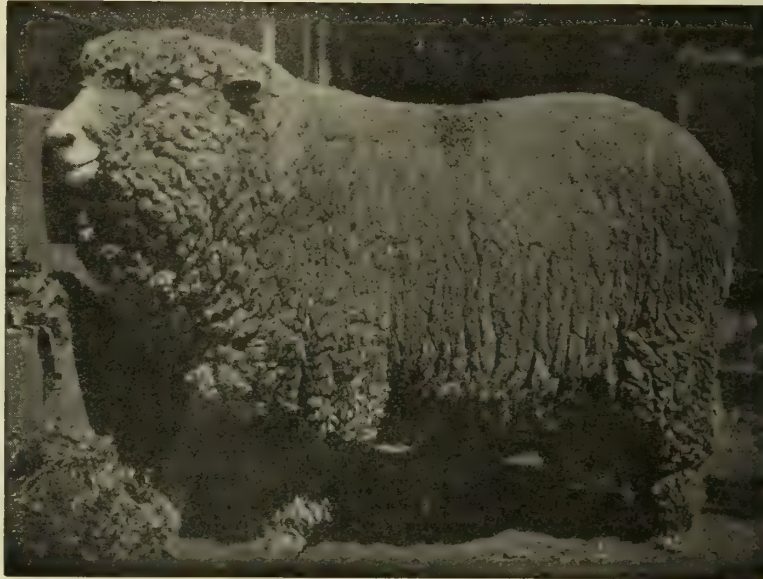
or The Proprietor,

J. A. JOHNSTONE, Bushey Park, Palmerston South, N.Z.

TEVIOTDALE REGISTERED CORRIEDALES

The Drought Resisting Breed

These Sheep have been bred on the Teviotdale Estate for 38 years, and are the heaviest clipping Corriedales in the Dominion.



TEVIOTDALE CHAMPION RAM.

They are guaranteed to breed Absolutely True to Type.

They have been under the charge of the originator since the inception of the flock

Experience with these sheep during the recent drought at Tocal Station in Western Queensland, proves them to be ALL BUT DROUGHT RESISTING.

Where Merinos died, THE CORRIEDALES SURVIVED.

The recent successes of this flock comprise:—

At the Panama Pacific Exhibition

Reserve Champion Ewe

First and Second Prizes for Ram Lamb. First and Second Prizes for aged Ewes. First, Second, and Third for Yearling Ewes. Second for Yearling Ram. (No aged ram from this flock was exhibited.)

Corriedale Wool is the best for Khaki

In the wool section at the Panama Exhibition, Teviotdale wool was the admiration of all experts, and secured the following awards: 1 gold medal, 2 silver medals, 1 bronze medal.

There is no doubt that the Corriedale is the future general purpose sheep for highest quality of wool and mutton.

At the scouring competition last November Teviotdale sheep again gained first place for heaviest fleece.

Rams and Ewes for sale in quantities

G. D. GREENWOOD (Originator of the Breed), Teviotdale, Amberley, New Zealand

"The two most profitable general utility breeds."

Corriedale Sheep

for constitution, carcase, big lambings and bulky fleeces of even type and high value.

The Corriedale Park Stud, Wagga Wagga, New South Wales (Australian Corriedale Breeders' Association Flock No. 1), founded in 1882 by mating Stud Merino rams and Stud Lincoln ewes, inbred ever since, an outcross obtained by the introduction of the very highest grade of Stud rams, mainly from the N.Z. and Australian Land Company's

Moeraki Stud, New Zealand (founded in 1874).

During the past five years sheep from the Corriedale Park Stud have taken over 100 first and 20 Champion Prizes at Australian Sheepbreeders' (Victoria), N.S.W. Sheepbreeders' (Sydney), Melbourne Royal, Wagga Wagga, Albury, and Hamilton Shows.

RAMS cut from 15 to 25 lbs wool. **EWES** cut from 10 to 15 lbs. wool. Pen Pure Corriedale Wethers sold in Melbourne Sale Yards at £5 per head. Wool grown in Riverina appraised Geelong, 1917, at 23½d per lb.

NOTE.—Inspection of original letters from purchasers from all over Australia invited.

It pays to have the best.



Corriedale Rams, Ewes, Lambs, and Wethers.

Bred by, and the property of, J. F. GUTHRIE, Corriedale Park, Wagga Wagga, N.S.W.

500 Pure Rams (Poleys) of 1919 drop, for delivery at from 5 guineas upwards.

Red Polled Cattle



FLIGHT COMMANDER, 21 months, by Belligerent (imp.) ex Birdseye.

The most prepotent breed—splendid milkers, ready fatteners to heavy weights.

The Stud at Corriedale Park was secured from Mr. Ben Osborne, of Redbank, Harden, New South Wales—all imported or descended from high-class imported cattle.

The young stock are by **RENDELSHAM ELECTOR** (imp.)

Sire now in use **FLIGHT COMMANDER** by **BELLIGERENT** (imp.)—Dam, the famous cow, **BIRDSEYE**.

Pedigreed bulls for sale at from 40 guineas upwards.

APPLY J. F. GUTHRIE, Geelong, Vic., OR ANY AUSTRALIAN STOCK AGENTS.

The Rakahuri Corriedale Flock



Champion Corriedale Ram, Rangiora, 1915.
Bred by Hugh Ensor.

One of the best quality and heaviest
woolled flocks in New Zealand.

Established the record price of
19¼d. for Corriedale Greasy
Fleece Wool at the Christ-
church sales, Nov. 11th, 1915.

For shape and constitution the
Rakahuri sheep cannot be sur-
passed. Winners of many prizes.
Flock established 1889. Registered
N.Z. Flock Book.

STUD and FLOCK RAMS FOR SALE.

For full particulars apply to—

DALGETY & CO. LTD.

or **HUGH ENSOR.** Rakahuri, Rangiora, Canterbury, New Zealand.

The N.Z. & A.L. C^o's Corriedales



4-tooth Ram.
Champion and winner of two Specials, Christchurch Show, 1915.

The Company's flocks are No. 1 and No. 2 in the New Zealand Flock Book, and are the oldest in existence. Show-yard successes during the past 10 years have been very numerous, and include in that time 10 Championships at Christchurch, the premier show for the breed in New Zealand.

The New Zealand and Australian Land Company's New Zealand Corriedale Flock originated at the Levels Estate in Canterbury in 1874, when Mr. W. S. Davidson, the present General Manager, put 1000 specially selected Merino Ewes to Lincoln Rams, and their progeny, kept absolutely pure, now number over 6000 Ewes. The Flock was kept at The Levels until that property was resumed by Government in 1904, when part of the Corriedales was sent to Hakataramea, in Canterbury, and the remainder to Moeraki, in Otago, since which the purity has been strictly maintained.



4-tooth Ram.
Champion and winner Silver Shield, Christchurch Show, 1917.

STUD and FLOCK RAMS FOR SALE.

APPLY TO THE
New Zealand and Australian Land Co. Ltd., DUNEDIN.

Willigobung Romney Stud

REGISTERED FLOCK No. 25 A.L.S. ASSOCIATION.

Founded 1910 from imported stock. Elham and Short blood and individual records kept. Bred on high basaltic country on natural grasses only, and are famed for their constitution and wool wherever introduced

For further particulars apply—

J. W. CUNINGHAM, COURABYRA, N.S.W.



MARSHALL. Station bred.

WHITE ROCK MAINS CORRIEDALE STUD FLOCK

CANTERBURY, NEW ZEALAND.

Pure bred for over 40 years.

WOOL AND MUTTON

Leading stud Corriedale flock masters of New Zealand are using these rams, and the progeny of the flock are continually winning leading prizes at the chief shows in the Dominion at which Corriedales are shown.

RAMS FOR SALE

For full particulars apply—

WM. MACKINTOSH, White Rock Mains, Rangiora, Canterbury, N.Z.

OR DALGETY & CO., CHRISTCHURCH, N.Z.



Pair of First Prize Corriedale Ram Hoggets

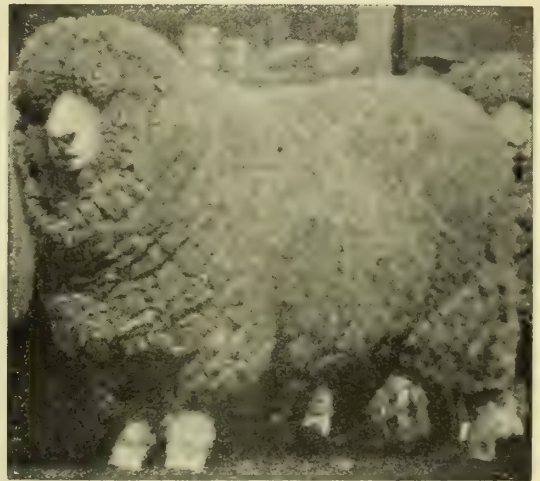
WYAMBEH CORRIEDALE STUD

The property of

John A. Sloane, Wyambeh, Mulwala, N.S.W., and

John A. Sloane & Co. Ltd., Neyliona, Carrathool, N.S.W.

Flock Founded 1882 by H. J. Corbett. Lincoln Merino Blood only. When exhibited have always proved successful, winning Champion Prizes 1918, 1919, 1920 at the Australian Sheepbreeders' Association Show. Registered Australian Corriedale Sheepbreeders' Association.

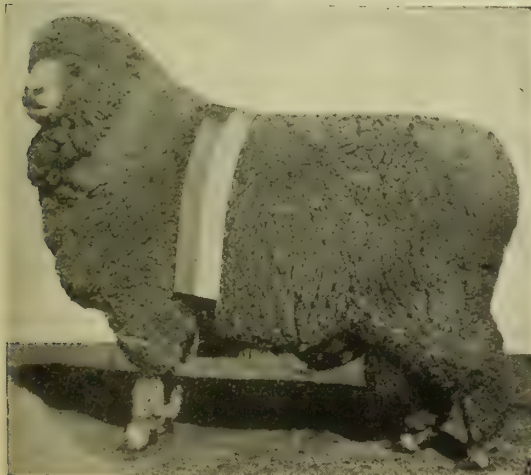


WYAMBEH, Two-year-old Stud Ram.

For Particulars of Rams for Sale apply—

JOHN A. SLOANE, Wyambeh, Mulwala, N.S.W.

The Eurella and Wairoa Corriedales



The flocks are direct descendants from 800 ewes purchased during 1904-5, and a subsequent purchase from the N.Z. and A. Land Co.'s Corriedales (No. 1 N.Z. Flock Book), established in 1874 and thus the oldest in existence.

Origin Lincoln-Merino and no other blood ever introduced.

All rams used in these flocks have been from the parent flock or bred by owners.

Registered in Australian Corriedale Sheep Breeders' Association
Flocks Nos. 15 & 16.

Following previous successes, at the 1919 Sydney Sheep Show these flocks practically "swept the pool," taking all First, Reserve and Champion Prizes.

Stud and Flock Rams For Sale. Guaranteed to breed true to type.

For particulars apply to— **D. MACFARLANE, Eurella Estate, Rylstone, N.S.W., or to MACFARLANE BROS., Wairoa Estate, Narrabri, N.S.W.**

Hilstead Romney Marsh Stud.

Combines the best English, New Zealand, Victorian and New South Wales Blood.

The Stud was founded by the purchase of fifty ewes and one ram—Cardington Supreme 1st—from the registered flock of Mr. Geo. F. Doyle, Cardington Hall, Molong, N.S.W., and by the purchase of the stud ram Egerton No. 77 of 1913 from the well-known registered flock of Mr. A. J. Hickman, Court Lodge, Kent. The flock has been from time to time added to by importations of the best English blood, five ewes from the flock of Mr. R. S. Strouts, Kent, in lamb to well-known registered rams, 10 ewes specially selected by A. Chapman (Secretary Kent or Romney Marsh Association), three special stud ewes from Mesham Flock, Kent, two ewes and one ram from the flock of Mr. A. J. Hickman, Kent. Further additions have recently been made from the flocks of Mr. A. J. Hickman, Mr. S. M. Osborne, Bolaro, N.S.W.; three prizewinners from Mr. A. E. T. Payne, Yarraview, Lilydale, Victoria; Messrs V. H. and W. H. Yelland, Treverder, Newlyn, Victoria; Mr. Thomas McDowall, Brightside, Braidwood, N.S.W., and Mr. Geo. F. Doyle, Cardington Hall, Molong, N.S.W.

STUD AND FLOCK RAMS FOR SALE.

For particulars apply **J. B. SAUTELLE, Hilstead, Bibbenluke, N.S.W.**



3 SPECIAL STUD EWES from the MESHAM FLOCK, KENT

Streanshalh Corriedales



WHITE ROCK.
Bred at Streanshalh and winner of five championships and many first prizes.

Registered Flock No. 3.

Founded in 1904 on the importation of 41 pure ewes and one ram from C. H. Ensor's White Rock (N.Z.) Stud, since when only the purest rams have been introduced.

The stud has been very successful at leading shows in Tasmania, while the wool from flocks that have used Streanshalh rams usually commands record prices in the Tasmanian market.

Stud and Flock Rams for Sale.

Apply the owner—

NORMAN NICOLSON,
Streanshalh, Macquarie River, Tasmania.



Grand Champion Corriedale Ram, Sydney, 1920. Purchased subsequently by N. Nicolson.

PENROSE STUDS of Pure Bred LINCOLN & ROMNEY Sheep.

Registered in the Lincoln Sheep Breeders' Association's Flock Book and the N.Z. Romney Association's Flock Book.



RANGATIRA V.
Lincoln Ram bred by Wm. Perry

The Lincoln Stud will be represented by 25 special rams and 30 pedigree one-shear ewes.

Sale date 19th January, 1921.

No stud rams will be sold beforehand except for export.

For particulars apply:

Wm. PERRY, Penrose, Masterton, N.Z.

The Penrose Romney Stud will be represented at the Stud Sale to be held at Masterton, on 18th January, 1921, by 50 specially selected rams and 50 pedigree one-shear ewes.



CHANCELLOR IV.
Romney Ram bred by Wm. Perry.

New Zealand Romney Marsh Sheep Breeders' Association

(Incorporated)

THE attention of Flock Owners in Australia is drawn to the merits of the New Zealand Romney Sheep. The stud flocks of the Dominion can supply your demands for rams and breeding ewes.

Our Romneys hold the World's Championship.

Correspond with the Association for full particulars.

The Secretary, P.O. Box 40, Feilding, New Zealand.

R. C. FIELD

Westfield

Westbury

Tas.



Shorthorn Stud

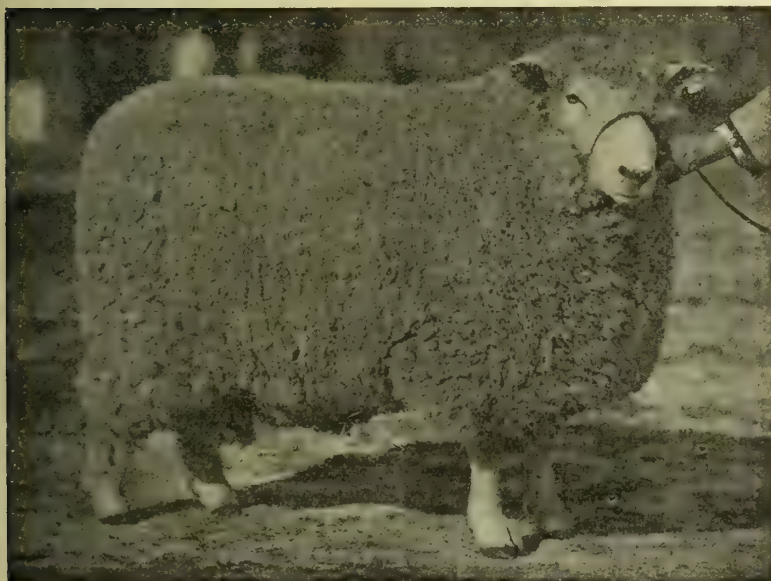
Founded on pure stock purchased from the Van Diemen's Land Co. about 1840. Only best blood used since.

STUD AND HERD BULLS FOR SALE.

WILLEROO ROMNEY MARSH STUD

REGISTERED IN THE AUSTRALIAN LONGWOOL SHEEPBREEDERS' ASSOCIATION FLOCK BOOK (FLOCK No. 29).

The property of **PAT. OSBORNE, Willeroo, Tarago, N.S.W.**



Willeroo Ram No. 46 of 1915.

1st Prize and Reserve Champion at the Royal Show, 1917, 1st Prize at the N.S.W. Sheepbreeders' Show, 1917, and Grand Champion at the Melbourne Royal Show, 1918.

The Willeroo Rams also made the highest average price at the Sydney Stud Sheep Sales—an average of £56 17s., the highest average for Longwool Sheep in Australia.

THIS Flock was founded in 1910, and now comprises 1100 Stud Ewes. The Ewes purchased for this flock are from the registered flocks of Mr. J. E. Quested, Kent, England; Mr. W. F. Jacob, New Zealand; Mr. G. F. Doyle, Molong, N.S.W., and from the late Mr. James Gibbs' flock, which was all pure Elham blood.

Rams purchased for this Flock from England—in 1915 three from Mr. J. E. Quested, in 1916 two from Mr. Quested, one being the Champion at the Ashford Show and a First Prize Ram at the Royal Show, England; and one in 1916 from L. H. and G. W. Finn—this ram won the Championship for Wool at the Ashford Ram Show in 1916.

Prizes won by this Stud in 1916, 1917, 1918 and 1919 at the Sydney and Melbourne Shows:—7 Grand Championships; 3 Reserve Championships; 38 First Prizes; 26 Second Prizes; 17 Third Prizes; and 3 First Prizes for Wool.

The Willeroo **Romney Marsh Cross** have also won First Prizes four years following, competing against all breeds at the Sydney Sheep Shows, as follows:—

First Prize for Pen of ten Fat Wethers for Export.

First Prize for Pen of ten Fat Wethers, judged on Commercial Value.

First Prize for Pen of ten Fat Wether Lambs, judged on Commercial Value.

Stud and Flock Rams always on Sale.

Full Pedigrees of all Stud Sheep are kept.

FOR FURTHER PARTICULARS APPLY TO—

D. A. WHITE, Stud Manager, Willeroo, Tarago, N.S.W.

BOLARO ROMNEYS

Registered Aust. Longwool Sheepbreeders' Association, Flock No. 23.

The PROPERTY of S. M. OSBORNE.

Bred on high country and **grass-fed**. Noted for **great constitution and very heavy, dense fleeces.**

The following prizes were won at the N.S.W. Sheepbreeders' Show, 1919 (the largest show of the breed in Australia):—Champion Ram, Reserve Champion Ram. 1st and 2nd prizes for ram over 2 years, 1st and 3rd prizes for ram over 1 year and under 2 years, 2nd prize for ram under 12 months. Reserve Champion, 1st and 3rd prizes for ewe over 1 year and under 2 years. 1st, 2nd and 3rd prizes for ewe under 12 months old, 1st and 3rd prizes for pen of 2 rams under 12 months old, 1st prize for pen of 2 ewes under 12 months old.

STUD and FLOCK RAMS always
on Sale at reasonable prices.

For further particulars apply—

FRANK FILE, "BOLARO,"
COOMA, N.S.W.



BOLARO No. 15 of 1916.

1st and Champion of N.S.W. Sheepbreeders' Show, 1919.

Quested's Romney Marsh Stud Flock and Herd of Pedigree Red Poll Cattle.



QUESTED'S No. 11 of 1917.

Champion Ashford Show 1918. Sold by Public Auction for 1,000 guineas. Resold at Buenos Aires for record price of £1,600.

Over 500 PRIZES

Won for Sheep including:

CHAMPIONSHIP CUP for **BEST FLOCK** of
'ROMNEY MARSH EWES in England.

Championship Cup won at Ashford Show and Sale **Five Years in succession. TEN Challenge Cups** won outright at this Show.

1438 Stud Ewes to Ram in 1918.

Individual Pedigree of every sheep since 1894.

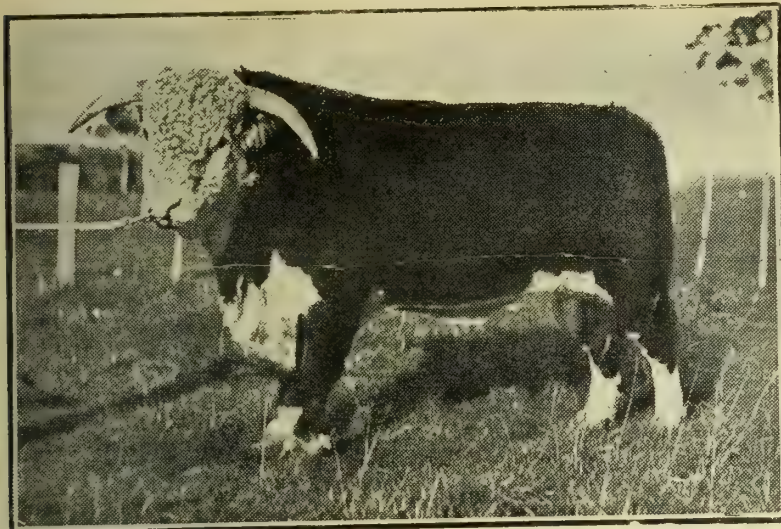
For particulars apply to Owner:

J. EGERTON QUESTED

"The Firs," Cheriton, Kent,

ENGLAND.

Cable Address: **ANIMALS SHORNCLIFFE CAMP**
Railway Station, SHORNCLIFFE, S.E. & C. Railway



A great Herd, with a
wonderful Sire—
"PRESIDENT WILSON,"
3494 (imported),
purchased at 2220 Guineas
at its head.

Bushy Park Stud of HEREFORD CATTLE

This Herd is now composed of a small but very select group of magnificent Cattle, every individual in which is first-class. In fact, it may safely be said without the slightest exaggeration that in no part of the world could they be excelled.

Possessing as they do the great advantage of being reared under natural conditions, absolutely without housing or forcing—even those which are being prepared for Showing being left out at night—it will readily be seen how valuable they must be for breeding good sound-constituted stock. None but long-pedigreed animals are kept in this Herd.

Efforts are now being made to secure shipping for stud stock from New Zealand to South America, which will no doubt be arranged within the next year or so, and it behoves all Hereford breeders to place themselves in a position to take advantage of this great market.

There are now available for private sale at Bushy Park the following high-class Bulls at very reasonable prices:—

Two two-year-old Stud Bulls by "Rufus" (imp.)

A grand selection of Stud Yearling Bulls by "Rufus" (imp.): "Elect 19th," "Maymorn" and "Count Rufus."

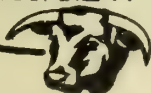
And this season the first crop of calves by "President Wilson" (imp.) will make their appearance.

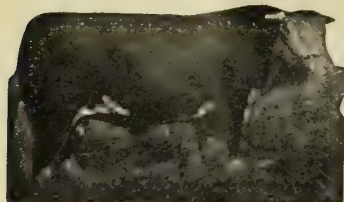
There is also a splendid lot of two-year-old Run Bulls and a few Run Yearlings, all of which have been handled and tied up.

For Further Particulars apply to:—

FRANK MOORE

BUSHY PARK, KAI IWI
WANGANUI, NEW ZEALAND.





"WONDER."

Stud Bulls and Heifers for sale; also Pure Herd Bulls.

All Herd Bulls bred at Tocal are perfectly pure bred, which gives them a great advantage over the ordinary grade bulls.

Inspection invited.

Correspondence should be addressed—

TOTAL Stud and Herd.

Hereford Cattle

and THOROUGHbred HORSES.

The Oldest Herd in Australia.
Established at Tocal in 1844.

Estate F. REYNOLDS, Tocal, Paterson, N.S.W.

MANSEL COURT STUD HERD.

THREE FIRST-PRIZE WINNING YEARLING BULLS

From a pen-and-ink sketch by
Frank Calderon, R.A.

Reading from the left: MANSEL BANNER MASTER (37354), 1st prize Royal Show, 3rd prize Worcester; MANSEL BANNER GUARD (37350), 1st prize Royal Counties Show; MANSEL BANNER REX (37359), 1st prize Bath and West, 1st prize Hereford and Worcester Agricultural Society's Show.

Four first prizes have thus been won by three different bulls from one herd—a record.

Apply to—

CAPTAIN R. T. HINCKES,

Mansel Court, Hereford, England.



ROYAL FAME at 9 months.

Amateur Kodak enlarged.

GARNONS HEREFORDS

The property of

Sir J. R. G. Cotterell, Bart., Garnons, Hereford,
England.

ROYAL FAME, v. 51, at 9 months. Sire Sovereign 35628, dam Queen Elizabeth by Administrator 27298. Bred by Sir J. R. G. Cotterell, Bart. Sold at a high price to Senor Rodriguez, Uruguay.

During the last 20 years the Garnons Herd has won some 200 Champion and other prizes at all leading Breed and Fat Stock Shows in England. Stock Bull Saladin 31957, sire of Sovereign 35628: 1st and Champion Herefordshire and Worcestershire A.S.; 1st and Reserve Champion Royal Agricultural Soc., Cardiff; 1st Lord Tredegar's Newport, and sold for 4,000 gs.; Lovelace, 1st Royal Agri. Soc.; Minstrel, 1st Royal Counties, Reading; Steer, 1st Smithfield Club.

Catalogue of Herd on application.

A. J. HICKMAN & Co.

Halse Grange,

Brackley, Northants.

Cables:

HICKMAN, BRACKLEY, ENGLAND.



The largest Purchasers of Pedigree Live Stock for Export in Great Britain. Illustrated Pamphlets and Testimonials on application.



The Hereford can be bred pure in the North and retain his size and constitution.

THERE is no need to cross a Hereford herd with some other breed. The Hereford can hold his end up in the hottest climate and under the hardest conditions. The Hereford cow is a prolific breeder and does as well North of Capricorn as South of it.

The following stud breeders can supply early-maturing Hereford blood both for Stud and Herd purposes:

R. S. Archer, Gracemere, Q.
 J. H. S. Barnes, Canning Downs, Warwick, Q.
 J. A. Beattie, Gisborne, Vic.
 F. M. Bell, Coochin Estates Co., Coochin Coochin, Boonah, Q.
 Commander Biddlecombe, Golf Hill, Shelford, V.
 F. E. Body, Heathbogrie, Emmaville, N.S.W.
 A. W. Bootes, The Island, Tumbalong, N.S.W.
 C. J. Campbell, Rangers Valley, Glen Innes, N.S.W.
 T. A. Clapperton, Nanango, Q.
 S. W. Cooke, Murndal, Hamilton, Vic.
 F. Cory, Vermont, Warwick, Q.
 H. W. Curtis, Abbey Green, Llangothlin, N.S.W.
 F. Dearden, Daisymount, Tenterfield, N.S.W.
 W. A. Dehnert, Ballan, Vic.
 Dookie Agricultural College, Dookie, Vic.
 W. V. Dowling, Gumin, Warrumbungle, N.S.W.
 H. F. Elwyn, Tindal and Son, Gunyan, Inglewood, Q.
 J. H. Fairbairn, Michelago, N.S.W.
 Fenwick Bros., Myall Creek, Glendon, via Singleton, N.S.W.
 H. L. Lindsay-Field, Warbreccan, Denillquin, N.S.W.
 W. H. Friend, Laurel Park, Burradoo, N.S.W.
 Halford and Willis, Bundoran, Dunkeld, Vic.
 A. L. Harris, Condel Park, Maldon, N.S.W.
 Mrs. Lumley Hill, Bellevue, Coominya, Q.
 C. W. Huf, Braemar-street, Essendon, Vic.
 F. C. Hughes, Malarga, Boompa, Q.
 A. A. Kemp, West Kempsey, Macleay River, N.S.W.
 K. H. M. Kennedy, Carbean, Quirindi, N.S.W.
 F. W. Kennedy, Kenalea, Upper Rouchel, N.S.W.
 J. P. Lawless, Goomeri, Q.
 W. M. Loder, Abbey Green, Singleton, N.S.W.

Lord and Sons, Eskdale, Esk, Q.
 C. M. Lowe, Lowe Bros., Yamble, Gulgong, N.S.W.
 H. M. Mair, Colly Creek, Willow Tree, N.S.W.
 F. Maxwell, Maxwellton, South Grafton, N.S.W.
 A. J. McConnel, Dugandan, Boonah, Q.
 Edgar McConnel, Cressbrook, Toogoolawah, Q.
 C. H. McKeahnie, Booroomba, Queanbeyan, N.S.W.
 Thos. Muirhead, Jas. Gibson Est., Belle Vue, Epping, Tas.
 Mulcahy Bros., The Grange, via Nanango, Q.
 A. Murphy, Ferndale, Blandford, N.S.W.
 Norton Bros., Elswick, Walcha, N.S.W.
 J. Ralston, Sandylands, Tabulam, N.S.W.
 Exors. Frank Reynolds, Tocal, Paterson, N.S.W.
 D. F. Reynolds, Tocal, Paterson, N.S.W.
 Percy Reynolds, Hobartville, Richmond, N.S.W.
 Ray Reynolds, Hobartville, Richmond, N.S.W.
 Sid. Reynolds, Duninald, Paterson, N.S.W.
 Jas. Sparkes, Lyndley, Jandowae, Q.
 A. H. Stirratt, Euroa, Gladstone, Q.
 J. Taylor, Winton, Campbell Town, Tas.
 C. H. Tindal, Ramornie, Copmanhurst, N.S.W.
 L. B. Tones, Junabee, Warwick, Q.
 C. H. Turlich, Heidelberg, Benaraby, Q.
 J. T. Turnor, Holmwood, Woodford, Q.
 Van Diemen's Land Co., Burnie, Tas.
 H. H. Waddell, Benvenue, Gayndah, Q.
 W. Wallace, Wallacedale, Kergunyah, Vic.
 G. B. Waller, Wallarobba, N.S.W.
 Estate late R. W. White, Blandford, N.S.W.
 C. M. Wright and Sons Ltd., Wallamumbi, Armidale, N.S.W.
 W. H. Yelland and Sons, Treverder, Newlyn, Vic.

Australian Hereford Society

303 Queen Street, BRISBANE.

GUNYAN HEREFORD STUD HERD.



MAGNITUDE (Imp.)

STUD & HERD BULLS FOR SALE

All Females are eligible for Entry in A.H.H.B.

Stud Bulls in use at present—

Magnitude (imp.), winner Championship, Brisbane, 1918, Rosador 2nd (First Prize, Sydney), Wonder 3rd (First Prize, Sydney), Sir Edgar (First Prize, Sydney), Lord Lyndley (First Prize, Brisbane).

Apply to

TINDAL & SON, Gunyan, Texas,
via **Inglewood, Queensland.**

LYNDLEY HEREFORDS

Founded on Reynolds, Beattie & Imported Stock.

All herd bulls are pure bred, only Stud Book bulls and cows used.

Lyndley Herefords exhibited since 1913 on 7 occasions and have won 8 Championships, 11 Reserve Championships, 58 firsts and 35 seconds, and hold the Australasian record price 1125 gns.

Stud bulls and heifers for sale. Also pure herd bulls.

Inspection Invited.

Apply JAMES SPARKES, LYNDLEY, JANDOWAE, QUEENSLAND



MANSEL BANNER PRINCE (imp.) 37,357 E.H.B. Age 1 year 3 months.
Now used in Lyndley Stud.

Harben Vale Hereford Stud Herd



ADMIRAL (imp.) 22 months.

The "Harben Vale" Herefords are founded on Stud bulls and heifers purchased from the noted breeders, Messrs. S. Reynolds, of "Duninald," Paterson, N.S.W.; J. A. Beattie, "Gisborne Park," Victoria; and Tindal & Son, of "Gunyan," Queensland.

INSPECTION INVITED.

For particulars apply

The Executors of the late R. W. WHITE,
R. K. WHITE, Manager.
Harben Vale, Blandford, N.S.W.

Mrs. C. Lumley Hill.**BELLEVUE STUD HEREFORDS****Bellevue, Queensland**

Composed of Pedigree Cows with pedigrees running back ninety years in Stud Books, including such famous Championship Sires as:—"Field Marshal," "The Admiral," "Lord Clare," "Lloyd George" and "Lovelace" (imp.), bred by Sir John Cotterill, Bart., Gamons, Herefordshire, England. Best class Pedigree Stud Bulls and Herd Bulls for sale by Stud Book Sires from England, New Zealand and Southern Colonies.

Apply to **THE MANAGER, Bellevue, Q'land.**



"LOVELACE" (imp.)
1st Royal Show, Cardiff, Wales, England, under 12 months 1919.



COMMODORE 2nd. Aged 2 years 1 month. By MAGNITUDE (imp.)

RAMORNIE HEREFORD STUD HERD

Founded on stock from the famous Gunyan Stud.

Stud and Herd Bulls for sale.

All Herd Bulls are pure bred, only Stud Book Bulls and Cows used.

Apply:—

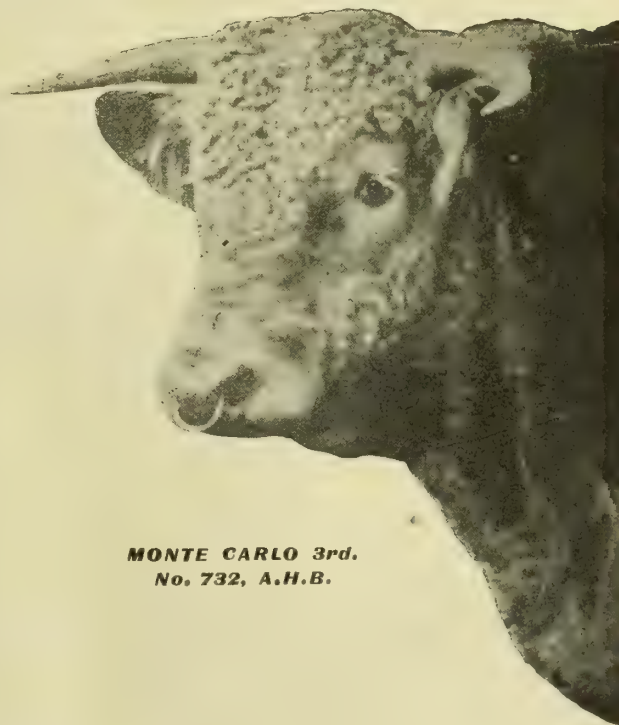
C. H. TINDAL, Ramornie, Copmanhurst, N.S.W.

The MICALAGO Stud

**The property of the Executors
of the late Hon. A. Ryrie, M.L.C.**

The Micalago Hereford Stud is founded on Stud Bulls and Heifers purchased from the noted breeders, Messrs. S. Reynolds, "Duninald," Patterson, N.S.W., P. Reynolds, "Hobartville," Richmond, N.S.W., and J. A. Beattie, "Gisborne Park," Gisborne, Victoria. The Stud is noted for robustness of constitution, bred and reared 2301 ft. above sea level.

In 1920, the "Hereford Stud" gained two (2) Champion Prizes, nine (9) Firsts, one Second at Southern Shows, and, in a field of 36, in the class one year and two, at the Royal Jubilee Sydney Show, Third Prize with "Paris," by "Monte Carlo" 3rd, No. 732 A.H.B., Dam, "Spot" 13th, Vol. 6, A.H.B.



**MONTE CARLO 3rd.
No. 732, A.H.B.**

Inspection invited, apply

The Manager, "MICALAGO," Michelago, N.S.W.

BELLE VUE HEREFORDS.

The Estate of the late JAMES GIBSON, BELLE VUE, EPPING, Tasmania.



ROSADOR.

Bred by Henry Beattie & Sons, Vic. Sired by Royal Duke, dam, Lady Roseberry 2nd. Purchased by the Trustees James Gibson Estate in 1908.



BELLE VUE ROSADOR 4th.

Three years old. Bred by Trustees James Gibson Estate. Sired by Rosador, dam, Lady Betty. Was Champion Hereford Bull at the principal Tasmanian Shows in 1918 and 1919.

BELLE VUE MERINOS

Belle Vue is the home of the famous Sir Thomas flock All Belle Vue sheep are descended from Sir Thomas and the same original lot of pure ewes.

FOR PARTICULARS APPLY—

THOMAS MUIRHEAD, The Manager, BELLE VUE, EPPING, Tasmania.



LADY PRESIDENT 8th.
2 weeks old.

LADY PRESIDENT 4th.
3 years 11 months old. Weighed 1615 lbs. at Aug. 1918 Brisbane National with Lady President 7th as calf at foot and she took 1st prize then as cow 2 yrs. and under 3 yrs.

ISIS 2nd.
1 year 8 months old.

LADY PRESIDENT 7th.
1 year 1 week old.



9-month-old Bull Calves

High-class Stud and Herd Bulls for sale.

All females and bulls used in the herd are entered in the Herd Book.

Herd established nearly 50 years.



9-month-old Bull Calves.

CRESSBROOK HEREFORDS

Apply to—

EDGAR C. McCONNEL,
Cressbrook, Toogoolawah, Q.

BENVENUE STUD HERD OF HEREFORD CATTLE.

Established at "Benvenue," Singleton, N.S.W., in 1873.

The W.W. BRAND is well known in Queensland.

IMMUNE.



LANSDOWNE (imp.), 2 years 5 months.

STUD & HERD BULLS FOR SALE.

All herd bulls are pure bred.
Inspection invited.

**H. H. WADDELL,
Benvenue,
GAYNDAH, Q'LD.**

DUNINALD Stud and Herd.

HEREFORD CATTLE.

Stud Bulls and Heifers for Sale; also Pure Herd Bulls. All Herd Bulls bred at Duninald are pure bred. Inspection invited.

Correspondence should be addressed—S. REYNOLDS, Duninald, Paterson, N.S.W.



"CUTMORE"—1st Prize Grand Champion, R.A.S. Sydney, 1911.

"ABBAY GREEN" STUD & HERD HEREFORD & DEVON CATTLE

The "Abbey Green" Hereford and Devon Herds were founded by the purchase of bulls and cows from the best herds in New South Wales and South Australia in 1908. Only best bulls procurable used since.

The cattle are noted for their hardiness, being bred 5000 feet above sea level, and mature very quickly when taken into hot climates.

YEARLING STUD AND HERD BULLS FOR SALE

Full particulars from **H. W. CURTIS, "Abbey Green," Llangothlin, N.S.W.**



"Curley" 96, aged 4 years. Used in Abbey Green Hereford Stud, 1918-20

Hobartville Stud

Hereford Cattle.  Thoroughbred Horses.

High-class Stud Stock for Sale. Inspection Invited.

Apply **PERCY REYNOLDS, Hobartville, Richmond, N.S.W.**



EATON CONQUEROR. (IMP.)
Aged 2 years 2 months. Live weight, 1820 lbs

GISBORNE PARK STUD HEREFORDS AND ENGLISH LEICESTERS.

THE HEREFORD STUD was founded in 1869. Noted for robustness of constitution, heaviness of flesh, symmetry and trueness to type. Bred and reared nearly 2000 feet above sea level.

THE ENGLISH LEICESTER STUD was founded in 1908 on the best New Zealand blood. Famous for hardy constitutions, flesh and wool. The ideal mutton sheep for early lambs.

**J. A. BEATTIE, GISBORNE PARK,
GISBORNE, VIC.**



BROADWARD ECLIPSE (Imp.). Used in Gisborne Park Stud.

CONDELL PARK

HEREFORD CATTLE.  BERKSHIRE PIGS.

Cows are culled heavily every year, and only the best bulls used.

All herd bulls are pure-bred, and eligible for entry in the Australian Hereford Herd Book.

The pigs are noted prize-takers at the R.A.S. Sydney Show.

**STUD and HERD BULLS. INSPECTION INVITED.
STUD PIGS FOR SALE.**

Apply

A. L. HARRIS, CONDELL PARK, MALDON, N.S.W.



CORNCRAKE (Imported), aged 1 years and 3 months.

HAMBLEDON HILL SHORTHORNS

Pure Derrimut blood and imported stock



SIRES.

Bolinda Duke of Derrimut 392nd and Bolinda Duke of Derrimut 425th, both directly descended from Lindenow Duke of Derrimut 40th.

COWS.

From Bolinda Vale, Rathfarnham, Clifton, and Dugdale and Creber's Studs, Vic.; Estate late James Holmes, Bathurst, N.S.W.; Te Aute Stud, N.Z.; besides English imported females.

A few females 12 months to 3 years for sale. All entered or eligible for entry in S.H.B. of A. Vol. 2.

Full particulars from

Lloyd Jones, Hambledon Hill, Singleton, N.S.W.

BINNIA DOWNS SHORTHORNS



BARITONE

Champion Shorthorn Bull, Sydney Royal, 1918; 1st and Champion, Sydney Royal, 1920, and Governor-General's Cup; 1st and Champion, Melbourne Royal, 1920, and winner of Gold Medal awarded by the Shorthorn Society of Great Britain and Ireland. Bought for 1,700 guineas. Now being used in the Binnia Downs Stud.

THE FEMALE STOCK ARE AN EXCEPTIONALLY HIGH-CLASS LOT.

STUD AND HERD BULLS FOR SALE.

For particulars apply—**J. McMASTER, Binnia Downs, Coolah, N.S.W.**

Founded in 1908, and built up on the best blood procurable from leading Victorian studs—J. E. Robertson, Glen Alvie; A. J. Simpson, Clifton; John James, Derrimut; Ball Bros., Zaretan; A. J. Webb, Rathfarnham; N. Falkiner, Noorilim, etc.

The following additions to the stud were made by purchase at the Sydney Royal Show, 1918:—

Stud Bull BARITONE, 2 years 7 months, at 1,700 guineas, from Messrs. Parsons & Robertson, Watch Hill, Vic.

Stud Bull HIGHTON DUKE OF DERRIMUT, 12 months old, at 1,000 guineas, from Messrs. Lidgett Bros., Vic.

Stud Heifer ROYAL JESSAMINE 89th, at 400 guineas, from Messrs. Parsons and Robertson, Vic.

Stud Heifer DUNDAS DUCHESS OF DERRIMUT 13th, at 400 guineas, from Mr. A. J. Simpson, Clifton, Vic.

Edgecote Filbert (imp.) 1075 gns. **Rose of Chedglow** 51st (imp.) C.H.B. Vol. 65.

Bianca Belle 9th (imp.) C.H.B. Vol. 64.

Hilda Warden (imp.) C.H.B. Vol. 64. **Alkbank Undine** 4th (imp.) C.H.B. Vol. 64.

"MILTON PARK" SHORTHORNS

A FEW
YOUNG
STOCK
FOR
SALE.



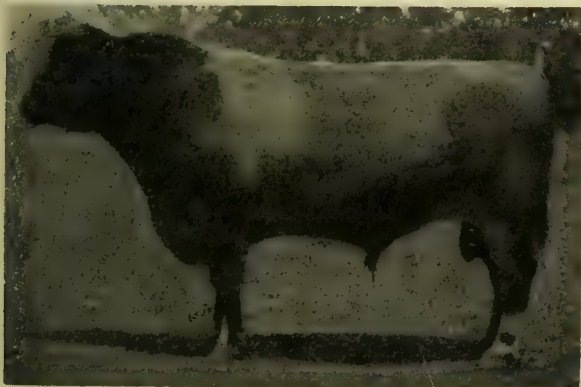
MASTERKEY (imp.)

"Masterkey,"
sire of
the winning
female
group at the
Royal Show,
of England,
1920.

For particulars of Stock For Sale, apply to—

The Manager, "MILTON PARK," Bowral, New South Wales.

LYNDHURST STUD, WARWICK, Q.



LYNDHURST ROYAL PEER.

Champion Bull, Brisbane, 1912-13-14-15-17; Toowoomba, 1914-15;
Warwick, 1911-12-13-14-16-17.

MURWEH, Charleville, Q.

THE MURWEH SHORTHORN STUD was formed in 1917, 400 high-class cows and heifers being sent there from Dulacca West with a number of high-class stud bulls, Lyndhurst bred, many of them prize takers, also the New Zealand bull, Diamond Crest. On the rich western country these cattle have done exceptionally well. The young bulls now for sale at Murweh are a very fine lot.

Stallion—Hartfell. Apr Laddie ex Light Heart, 10 gns.

NOW FOR SALE—Murweh:—500 Bulls. Lyndhurst, Dulacca West and Murweh bred, 2 and 3 years old. For particulars apply—

C. E. McDOUGALL, LYNDHURST, WARWICK, Q.; or McDOUGALL & CO., WARWICK, Q.

Pure Shorthorn Stud and Herd Bulls

Combining robust constitutions with depth of flesh and quality. The Sires used in the Lyndhurst Stud have all been prize winners and include Bapton's Patriot (imp.), Clippers Duke (imp.), Hampton Bowling (imp.), and Clogher Augustus (imp.). First Sydney and Champion Brisbane. The Sires now in use are Lyndhurst Royal Peer (winner of 13 Champion prizes, including 5 Brisbane Champions), Clogher Augustus (imp.), Lyndhurst Royal Peer 11th (4 Firsts Brisbane and Reserve Champion), 3rd Duke of Ettrick, and Lyndhurst Royal Peer 13th.

The cows are mostly direct descendants of 4 cows imported by the late Hon. J. D. Macansh in 1875, and include 25 cows selected from Mr. Baldwin's Durham Court stud in 1913.

The Lyndhurst cattle have been very successful at the Queensland National Association Show, Brisbane, having won 7 Championships with bulls and 4 with cows during the last 12 years, also any number of class and group prizes.

STALLIONS.

Chantemerle (imp.) Polymelus ex Amphoraria	...	...	50 gns.
Seremond (imp.) Desmond ex Serenata	...	...	30 gns.

DULACCA WEST STUD, Roma, Q.

THIS SHORTHORN STUD was formed in 1904 with 100 Lyndhurst Stud cows and has since been added to each year from Lyndhurst Stud; also includes purchases from Baldwin's Durham Court Stud. The sires in use are all high class and mostly prize takers.

COOMBING PARK SHORTHORNS



BOLINDA DUKE OF DERRIMUT 400th.

Founded on high-class female stock of Lee and Lowe blood. Extensive purchases of pedigreed cows have also been made from the studs of the late James Holmes, Bathurst; Sir Rupert Clarke, Bolinda Vale; and Mr. Norman Falkiner, Noorilim, Victoria.

The bulls now in use are from
Bolinda Vale.

**STUD AND HERD BULLS
FOR SALE.**

THE WHITNEY PASTORAL CO., Coombing Park, CARCOAR, N.S.W.

BARRAGAN STUD AND HERD

No pampering — All grass fed — Rich colours.

50 Years of careful breeding.

THE BARRAGAN HERD was founded nearly 50 years ago by the late E. Tindale, by the purchase of choice cows from the stud of the late Thos. Lee, Woodlands, Bathurst, and at the clearing sale of W. and J. Lee, of Millbank, Bathurst, whose cattle were descended from the original stud of Wm. Lee, Claremont, Bathurst. Sires used were from the studs of S. Gardiner; Robertson Bros., Colac; J. H. Angas, and the choice of John Lee of Bylong's bulls. Duchess females were also secured from the McCulloch dispersal sales.

The present owner purchased the above foundation, and has since added from the last McCulloch dispersal other females of the Persis (imp.), Lobelia (imp.), May Rose, Lady Weston, and Charmer strains; also the imported bull Prince Millicent (96519).

Bulls now in use were prize winners in large classes at Royal Sydney and Royal Melbourne Shows—Lord of the Vintage and Mahonga's Comet.

**Stud and herd bulls eligible for entry
in the herd book for sale.**



PERSIS VII.

Also pure pedigreed Berkshire pigs and Lincoln rams (registered flock).

The property of

R. S. HARRIS, BARRAGAN BARRAGANDAH, VIA MUDGEES, N.S.W.

Telegrams—WOLLAR.



"MOOKI ROTHERFIELD"
Now in use at Mooki Stud

R. R. DANGAR.

Mooki Springs Shorthorns

**HIGH-CLASS STUD and
HERD BULLS FOR SALE.**

APPLY **THE MANAGER,**
Mooki Springs, Quirindi, N.S.W.

The Nyingay Shorthorn Stud

THE PROPERTY OF
ROY SIMSON, Mungadal, Hay, N.S.W.

This stud was formed in 1902, and has been continuously selected for the production of sorts that are robust and deep fleshed.

**Stud and selected bulls usually
— for sale; also heifers. —**



NYINGAY SUMMERTON 7TH (Grass-fed). One of the stud sires.



ZARETAN DUKE OF DERRIMUT 22nd.
Purchased at the 1917 Sydney Royal Show for 460 guineas, and is now used in the stud.

GRAMPIAN HILLS SHORTHORN STUD

The Property of A., R., and F. BOWMAN,
Grampian Hills, Bunnan, New South Wales.

This stud was started in the early forties, and its purity has been maintained ever since by the use of the best bulls procurable.

At the Sydney Royal Show, 1918, Grampian Duke of Derrimut 6th was sold for 950 guineas.

STUD BULLS & COWS & HERD BULLS FOR SALE.

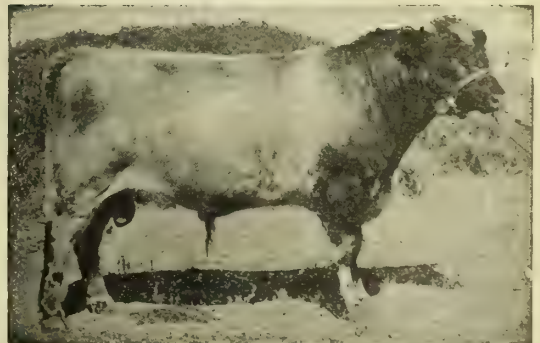
For full particulars apply to

A. BOWMAN, 279 George Street, Sydney,
or to the Manager, Grampian Hills, Bunnan.

THE JERULA SHORTHORN STUD

THE PROPERTY OF
COLIN CAMPBELL, Jerula, near Cowra, New South Wales

THE COWS of this Stud have been bred up from the Stud of the late **JOHN LEE** of Bathurst, and have been successful prizetakers.



NYINGAY WIDE 5th (at 23 months). Realised 400 gns. R.A.S. Sydney Sales, 1916.

Purchased by Mr. Colin Campbell, of Jerula, Cowra, N.S.W.
Bred by Mr. Roy Simson, Mungadal, Hay, N.S.W.

CLIFTON STUD Shorthorns

Old Established Herd of High-Class Shorthorns.

Carefully bred for constitution, quality and early maturity. Winners of many Champions and numerous other prizes at Sydney, Melbourne and Brisbane Shows. Where young sale stock command top prices.

A. J. SIMPSON, CLIFTON, HAMILTON,
VICTORIA.



A Noted Clifton Stud Cow.
"BOLINDA DUCHESS OF DERRIMUT 400th.



DIAMOND FAIRY.—1 & R.C., Hastings, 2, Palmerston N., 1916; 1, Hastings, 2 & R.C., Palmerston, 1 & C., Carterton, 1 & C., Wanganui, 1917; 1 & C., Masterton, 1 & C., Marton, 1 & R.C., Hastings 1 & C., Carterton, 1 & R.C., Palmerston N., 1 & R.C., Feilding, 1918; 1 & C., Marton, 1 & C., Taihape, 1, Hastings, 1919, and winning sire with progeny.

BLAIR ATHOL STUD SHORTHORNS

First-Class Stud and
Herd Bulls for Sale.

*Write for
Particulars*

DALZIELL BROS.,
Hunterville, North Island, New Zealand.



2-YEAR AND 3-YEAR HEIFERS.

DEVON CATTLE

Having regard to the great increase in the size of these Cattle their marvellous constitution, beef producing and improved milking qualities, they have become the best ranching cattle and most suitable for export.

Shows and Sales of Devon Bulls are held by the Society in February and October annually

For all particulars and Herd Book, and for Register of Animals for sale, price 2/-, apply to the Secretary of the Devon Cattle Breeders' Society—

JOHN RISDON, Wiveliscombe, Somerset
ENGLAND.



GRACEMERE & TORSDALE STUD HERDS

Shorthorns. Herefords. Red Polls.

HIGH CLASS BULLS FOR SALE.

Bred on Red Water Country and inoculated for Pleuro.

ARCHER BROS. Ltd., Gracemere, Qld.



NEW YEAR'S GIFT 18 months old.
Bred at Gracemere. Sire, Prince Regent 534. Dam, Fancy 215.

EAST TALGAI ABERDEEN ANGUS STUD

strong, Akitio, N.Z., and Proud Peer of Tolarno, bred by the late W. C. Grubb, of Tasmania, both of which are now in use in the stud. The herd at present consists of about 70 breeding cows with a fine lot of heifers coming on. Numerous prizes have been taken at the Brisbane Exhibition and other Shows in Queensland.

The East Talgai Aberdeen Angus Stud was formed some years ago by the importation of 8 high-class cows and a bull from the leading studs in New Zealand. In 1917 the whole of the Boolarwell, Queensland, stud of pure cows was purchased and since then two high-class stud bulls have been secured at high figures, viz., Mahoe of Akitio, bred by F. Arm-



"Proud Peer of Tolarno."



"Scottish Queen." Imported from New Zealand.

The 1919 drop of bull calves will be ready for Sale towards the end of this year.

Apply **GEORGE C. CLARK**, East Talgai, Elinthorp, Queensland.

COLLENDINA SHORTHORNS.

The Property of Henry Hay & Son.



COLLENDINA DUCHESS OF DERRIMUT 21st.

By Collendina Duke of Derrimut 11th out of Collendina Duchess of Derrimut 5th.

Foundation
Cows
purchased
from
Bolinda Vale.

Valuable
Young
Stock
for
Sale.

COLLENDINA CORRIEDALES

Pure Corbett Blood.

(Registered Flock No. 12, Australian Corriedale Sheepbreeders' Association.)

For particulars apply—**HENRY HAY & SON**, Collendina, Corowa, N.S.W.

EDINGGLASSIE POLLED ANGUS STUD

The property of White Bros., Edinglassie, Muswellbrook, N.S.W.

THIS Stud is founded and built up on blood imported from the best herds in Great Britain regardless of cost, and has been so maintained for the last 20 years.

Young Bulls for Sale, delivered on rail at Muswellbrook.

Further particulars on application to

White Bros., Edinglassie, Muswellbrook, N.S.W.



Imported Polled Angus Bull, Carolus of Mulben.

The Cannobie Lea Aberdeen-Angus Herd

Founded from one of the best strains and noted for constitution.

Orders can now be booked for Calves (Period 1920).

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The Property of Mr. A. S. G. Carlyon.



Stud Bull, Quality of Maisemore (Imp.)

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This herd, which is noted for good constitution and freedom from disease, has lately been improved by importations from the herds of Lord Rosebery; Kerr of Harviestoun; Kennedy of Doonholm; Cridlan of Maisemore Park, Gloucester; and Elliott of Duns.



Stud Cow, Pure Pride o Dalmeny (Imp.)

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The First Annual Sale takes place, without reserve, at Dunedin early in 1922. Look for fresh information in the next issue, and notify any of our Branches throughout the world if you are going to attend, so that accommodation, luncheon, etc. may be arranged.

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NEW SOUTH WALES,

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3-YEAR-OLD CLYDESDALE STALLION

Bred by F. S. Falkiner & Sons Ltd.

Sire, **BARON BELMONT** (Imp.) (C.S.B. 13973)

Dam, **ROSEBUD**, by Lord Dundonald (Imp.)

**A Number of Colts and Fillies
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F. S. FALKINER & SONS Ltd., Boonoke North, Widgiewa Siding, N.S.W.

A limited number of approved mares taken to Widgiewa stallions.

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The Property of E. C. FAIRWEATHER, Esq.



SUSSEX GOALKEEPER 34365. Bay, 17 hands, foaled 1915.

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The herd includes the best Dairy Shorthorn families in existence. Only cows giving a minimum of 8000 lb. retained; among these is Leazow Barrington, purchased at Attwater's sale for 1100 guineas, the record price for Dairy Shorthorns. Daily milk records checked by D.S.A.

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(2) **Apley Record Rosador 134663** (Perkins), sire Puddington Rosador (Sanday), dam Clarence Brown 12th.

(3) **Thornby Peer, Vol. (Wills)**, sire Thornby Pioneer 133922, dam Gladys Rose 12th.



TICEHURST NOBLEMAN 2nd.
1st Prize at The Official Spring Show of Sussex Cattle, 1920.

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The Southdown Flock is registered and individually numbered. It is unexcelled for type, character, and merit, and bred the Royal and Chichester Champions of 1919.

At the R.A.S.E. Show, Cardiff, 1919, five classes were exhibited and five First Prizes won, in addition to the Champion and Reserve Champion.

PEDIGREE LARGE WHITE AND LARGE BLACK PIGS.

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Boro' Draughtsman 34567, sire Warton Draughtsman 27895, dam 72776 Towthorpe Cloudy. Purchased in 1918 at Edgcote sale at the highest price of the year.

Sussex Goalkeeper 34365, sire Champion Goalkeeper 30296, dam 62037 Sussex Plum. Purchased at Newmarket Shire sale at top price in the sale. 3rd in strong class, S.H.S. Show, 1920.

This Stud, besides the above Stallions, possesses others of the best breeding in the country, and the Brood Mares are representative of all the best Shire families.



BETSY GREY 99791.
Winner of numerous prizes, including 2 Firsts, Dairy Show 1919, giving an average of 61 lb. during the Show.

PEDIGREE SUSSEX BEEF CATTLE.

The ideal breed for Argentina, South Africa, and wherever hardiness and robustness of constitution are required.

The Sussex Herd was formed mainly by the purchase of the best cows at the famous Lock Dispersal Sale, and comprises Betsy, Heedless, Darkie, Beauty, Millmaid, and other prize-winning strains.



Oxford Down Sheep

The Oldest Registered Flock.

Individual Pedigree of every sheep. Owned by Hugh Stilgoe, The Grounds, Adderbury, Banbury, Oxfordshire, England. The sheep of the present and the future. Unequaled as a pure breed, or for crossing purposes. They combine beautiful wool, with the best of meat, and will thrive in every part of the world. Many First and Champion prizes. Show Record 1919:—Royal Agricultural Society of England's Show at Cardiff, First and Second Prizes for Yearling Rams, First and Second Prizes for Wool. Birmingham Show, First and Second Prizes for Lambs. London Show, First and Second Prizes and Breed Cup for Lambs.

Telegrams :—"Stilgoe, Adderbury."

Oxford Down Yearling Ram. First prize winner at the Cardiff Show of the Royal Agricultural Society of England, 1919.

Cheviot Rams.

For Weight and Quality of Wool and for Mutton, combined with hardiness of constitution and activity, the CHEVIOT is outstanding. CHEVIOTS and their crosses have for years held leading positions in the Smithfield Carcase Competitions.

The Cross with the Merino is becoming more popular every year. Full particulars supplied by the Auctioneers, who will execute Commissions through a Shipping Agent.

**Andrew Oliver & Son, Auctioneers,
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Shearling Ram, "Millknowe Victory," which made the Record Price of £620 at our 1919 Sale.

The Sheep which sells to-day is the

Suffolk Sheep

Record after Record at Recent Sales. Demand from all Parts of the British Isles.



Ten Two-tooth Ewes sold for £500 (a record for ewes of any breed), Champion Pen Society's Sale. Champions over all Breeds, London Smithfield Show, 1919.

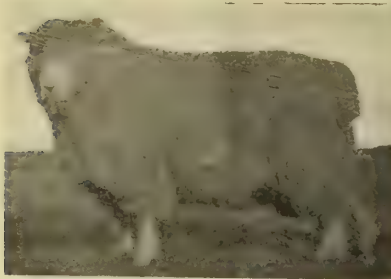
Special Sales at Ipswich July, August and September.

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**Unbeaten
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**Ideal
Hosiery Wool
—Good 56's.**

Oldport Flock & Shorthorn Herd.**Ryeland Sheep Flock No. 11, and Bates Cattle
of Good Families,****With Scale, Good Coats, and Dark Colours.****RYELAND SHEEP**—a breed not widely known but possessing a very great merit, both as regards Closeness and Quality of Wool, combined with an Excellent Carcase, a very Hardy Breed that thrives on hard keep.**PRIZES WON AT BREED SHOW, 1918-19.****RAMS AND BULLS FOR SALE.****Apply: C. H. HOBBS, Oldport, Oswestry, Salop.**

Ryeland Ram Lamb, 10 months.
Bred by C. H. Hobbs, 1919.



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Bred by C. H. Hobbs, 1919.

ROMNEY MARSH SHEEP.**The Registered Romney Marsh Flock at the Home of the Breed.**

NO. 18

Owned by ARTHUR FINN, Westbroke, Lydd, Romney Marsh, England

This flock, established for more than 140 years, maintains the highest reputation. Honours gained in 1912: 1st for wool at the R.A.S.E. Show. In the Ewe Flock Competition of the Romney Marsh Sheepbreeders' Association, 1375 Westbroke Ewes obtained the 1st Prize in the large Flock Class, and Reserve for the Champion Cup for the Best Flock.

Inspection invited of 2000 registered sheep grazing on the Marsh under natural conditions.

Telegrams and Cables: ARTHUR FINN, LYDD.

A.B.C. Code 5th Edition used.

Telephone No. 2, Lydd. Lydd is 70 miles from London, S.E. Railway.



Champion Romney Ram at Panama Exhibition, 1915, bred by Mr. Alfred Matthews in New Zealand, sired by a Westbroke Ram out of a Westbroke Ewe, both parents imported from the flock of Mr. Arthur Finn, Westbroke, Lydd.

SOUTHDOWN SHEEP.**UP-TO-DATE SUCCESSES.**

CHAMPIONS OVER ALL BREEDS AT THE GREAT LONDON (SMITHFIELD) FAT STOCK SHOW in 1916, both alive and dead; also Champion Carcase at Chicago International, 1916, 1917, and 1918. Earlier successes too numerous to record.



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SOUTHDOWN SHEEP**Unsurpassed for Fine Quality of both Mutton and Wool.****CHAMPIONS AT SMITHFIELD SHOW, 1916.****GREAT PRIZE SALE**

(Under the auspices of the Southdown Sheep Society)

10,000 Registered Southdown Ewes and Rams,**At Chichester, Sussex, ABOUT AUGUST EACH YEAR.****Auctioneers:****STRIDE & SON, Chichester, Sussex, England**

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A typical pen of Yearling Southdown Ewes

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Equal to any British Breed in Size of Carcase,
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Unrivalled for crossing purposes to secure increased depth of flesh, weight of carcase, together with heavier fleeces and increased length of staple. Hardy and full of constitutional vigor, with remarkable aptitude for early development. Two hundred registered flocks to select from.

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THE BUCKLAND SOUTHDOWNS.

Registered No. 550.

OWNEED by Lady Fitzgerald. Descended from such world-wide strains as those known as the Webb, the Throckmorton, the Adeane, the Pagham Harbour, and the Penfold. None are purer or better in respect to flesh or fleece. Full pedigrees available, both of males and females.

The choicest sires only in service, headed by ADISHAM NO. 15 of 1916, 11487 vol. 26, the Champion Ram at Chichester Show and Sale 1917, where he was purchased for 100 guineas.

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LUDDENHAM COURT ROMNEYS

Founded 1899.

Winners of

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CHAMPIONSHIP FOR EWE FLOCK, 1919.

A Flock of Choice Breeding and merit as proved by above Championship won by ENTIRE FLOCK,
judged on the farm in NATURAL BREEDING CONDITION.

INDIVIDUAL PEDIGREES. SOUND CONSTITUTION. TYPICAL FLEECE.

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ASHLEY STEVENS,

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The Hoo Romney Marsh Flock

Founded 1853.

Registered Vol. 1.

Maintained entirely on commercial lines, no flock affords a better selection of thoroughly reliable breeding stock. Yearly drafting for over half a century has produced a fixed and most desirable type, the more prominent characteristics being great width and spread of carcase, even and uniform fleeces, and a general flock likeness, with most typical and well-covered heads. The best sires procurable have invariably been used, and the result is that, once a purchaser of Stud Sheep, always a purchaser. Apply the owner, Walter Miskin, White Hall, Hoo, Rochester, Kent, England. Railway Station, Sharnal-street. Telegrams, Hoo, Rochester. Telephone, 10 Hoo.

The Surenden-Dering Flock

ROMNEY MARSH SHEEP.

Established 1858.

A typical Flock of ROMNEY MARSH Sheep, individually numbered throughout, is one of the attractions of this well-known sporting domain, owned by

Sir Henry E. Dering, Bart.

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The Flock's uniformity of type, character, fleece, and well-covered heads needs inspection to be assessed at its real value. Selections of the choicest bred specimens procurable are always on offer, and Colonial and Foreign breeders are invited to inspect. Every facility is offered for so doing on application to the Agent, Pluckley, Ashford, Kent.

Rail Station, Ashford or Pluckley, S.E. Railway. Telegrams, Pluckley. Telephone, 3A Charing.

The Nash Court Romneys

Registered Flock No. 192.

A typical Flock representative of the choicest strains of blood, mainly those associated with the well known names of Macknade, Queded, Syndale Farmer and Otham Flocks.

Selections have been exported to Argentine, Uruguay, Chili, Falkland Islands, Japan and India.

Reared naturally and unpampered, the Sheep are hardy and sound in constitution.

Apply the Owner—

MR. R. G. TAYLER,

Nash Court, Margate, Kent, England.

Kent or Romney Marsh Sheep

The hardiest and best grazing mutton and wool sheep of Great Britain. Successfully acclimated wherever they are required.

Annual Ram Show and Sale

Held at Ashford, Kent, in September.

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The Singleton Romney Marsh

Flock No. 132.

Outright winner of the Champion Prize for best Woolled Ram, Ashford, 1918 and 1919.

This Flock, owned by Mr. R. Stanley Strouts, Singleton, Great Chart, Ashford, Kent, England, ranks amongst the best of its breed. Its history is fully recorded since 1882, none of better breed is procurable, and individual pedigrees are available.

Its 1918 sale record proves its real value and worth. Eleven of fifteen head at Ashford went for export, ranging from 300 guineas. The other four were taken by home breeders for stud rams, ranging from 140 guineas, and the whole averaged £140 16s. 9d. The top-priced ram was First Champion Prize for the Best Wool Ram, 350 competing.

Telegrams, Great Chart, Kent.

Kent or Romney Marsh Sheep.

The Adisham Court Flock

FOUNDED 1916.

REGISTERED 1917.

Property of Mr. O. C. MILLEN, Adisham Court, Canterbury, Kent, England.

Descended from the choicest strains of prize winning Blood, reared naturally, none excel it for hardiness, typical character, weight of bone and evenness of fleece. Its 1918 and 1919 records are unexcelled. At Ashford, the principal Breed Exhibition and Sale of the year, in 1918 it won 2nd Yearling Ram R. Champion and 4th best pen of five, and in 1919 2nd best group of five. Its sale averages were—1918, £159/15/-, top price 300 guineas; 1919, £63/2/4, top price 130 guineas. The 1918 Yearling and R. Champion was resold in Buenos Aires for £550.

Apply Owner, as above.

Cables and Telegrams: Wingham.

RYELAND SHEEP

One of the oldest breeds of the British Isles, and the least crossed.

Leading Characteristics

Character and Symmetry. Hardy constituted. Mutton and Wool of the finest quality. Early maturity. Freedom from foot rot. Average weight of fleece washed 7½ lbs. Average dead weight of yearling at 12 months, 70 lbs. Special attention paid to export trade.

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The Hoaden Court Flock and Herd

ROMNEY MARSH SHEEP

RED POLLED CATTLE

Mr. H. T. GREENSTED, Hoaden Court, Ash, Canterbury, Kent, England,

Breeds and owns a Romney Marsh Flock, with full individual pedigrees, kept naturally without pampering, resulting in the production of sound, vigorous, thrifty sheep, having that most desirable of all qualities—even staple and uniform fleeces. Its notable successes in 1919 were 2nd prize for Small Flocks in the 1919 Flock Competition, and 4th for Yearling Ram at Ashford, 1919.

A Herd of Red Poll Cattle, a breed unrivalled for the dual purpose of Milk and Beef Production, is also kept at Hoaden, and specimens of the best lines of breeding are to be found there.

Rail Stations:—Adisham, Grove Ferry, or Sandwich, S.E. and Chatham Railway. Telegrams, Hoaden, Ash, Canterbury

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Being in touch with all the principal breeders
—we are in a favourable position to render
every assistance to intending purchasers.

Elder, Smith & Co. Limited

Stock and Station Agents, Wool Brokers, &c.,

ADELAIDE.

Stud Flocks of South Australia



TYPICAL SOUTH AUSTRALIAN RAM.

renowned for constitution,
size and heavy cutting
fleece of high-class warp
wool.

Sheepbreeders requir-
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any of the South Australian
Stud flocks are invited to
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In touch with All Leading Breeders, and can supply Any Breed of Sheep or Cattle.

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CRESSBROOK STUD, Toogoolawah, Qld.****Wednesday 2nd and Thursday 3rd March, 1921.**

Under instructions from Mr. Edgar McConnel, we will auction at the Station Yards a portion of the **FAMOUS CRESSBROOK HEREFORD STUD**, as Mr. McConnel is desirous of reducing his numbers. The cattle to be auctioned are all pure bred and all entered in the A.H.H. Book. This Stud was very heavily culled two years ago, and the whole of the cattle then rejected were sold. The cattle to be offered comprise approximately:—

- 72 STUD COWS AND HEIFERS**, No. 9's and older, all entered in A.H.H. Book, either in calf or with calves at foot to High-class Stud bulls, including some by Imported English Bulls. Included in the Cows are the well-known Champion Cows "Lady President 3rd and 5th."
- 52 STUD HEIFERS**, No. 0's, all registered as calves and eligible for entry in A.H.H. Book—a magnificent lot.
- 10 STUD HEIFERS**, pure bred, unregistered, by Stud Bulls ex Stud Cows.
- 16 STUD BULLS**, No. 0's and 9's (3 No. 0's by English Sires).
- 20 (about) HERD BULLS**, No. 0's and 9's—a first class lot.

**BRED IN TICK COUNTRY AND SHOULD BE IMMUNE.
FOR GENUINE STRAIGHT-OUT SALE.**

Catalogues will be prepared and posted to applicants.

For fuller details apply to:

MOREHEADS LIMITED,**Stud Stock Salesmen, BRISBANE.****DISPERSAL SALE****Mahara Stud Border-Leicesters**

AT THE SALE YARDS,
NEWMARKET, MELBOURNE,

2.30 p.m. THURSDAY, 27th JANUARY, 1921.

THE VICTORIAN PRODUCERS' CO-OPERATIVE CO. LTD. have received definite instructions from D. M. Aitken, Esq., to SELL, without reserve, the whole of his stud flock, and we take this opportunity of drawing the attention of intending buyers to the rare opportunity of buying from the best Border-Leicester stud in the Commonwealth. Mr. Aitken won both the ram and ewe champion at the Melbourne Sheep Show, 1918, also ram and ewe champion, Sheep Show, Sydney, 1919, also ram and ewe champion, 1920. The sheep are all in first-class condition, and buyers who cannot attend the sale are advised to forward their instructions direct to the Company.

1 ram, 1915 drop, champion Sheep Show, Melbourne, 1918; champion Sydney Sheep Show, 1919; winner of Sire Memorial, Melbourne Royal, 1919.

1 ram, 1918 drop; special stud ram, used in own stud.

3 rams, 1919 drop, extra well grown, and full of quality.

8 rams, 1920 drop.
48 ewes, 1915-1919 drop.

21 ewes, 1920 drop.

The Victorian Producers' Co-operative Co. Ltd. 589-605 Collins Street, Melbourne.

YOUNG MAN, life experience with stock, good working knowledge engines, pumps, motor cars, etc., college education, seeks position on a station, anywhere, about the end of April. Reply stating wages and conditions to "Southerner."

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The property of R. S. FALKINER.

**English Leicesters
Shorthorns.**

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"MARTINDALE" ESTATE****DENMAN, N.S.W.****THE PICK OF THE HUNTER RIVER DISTRICT,****FOR SALE DURING FEBRUARY, 1921, at the SCHOOL OF ARTS, MUSWELLBROOK.**

CONTAINING ABOUT

19,720 acres of rich Fattening, Agricultural, and Lucerne Land, subdivided into 68 blocks of 150 to 583 acres each.

WEAVER & PERRY Ltd., Sydney, and HIGGENS, PARKINSON & Co., Denman (acting in conjunction),

have received instructions from Messrs. MARTINDALE WHITE BROS., Martindale, Denman, to Sell by Auction, at the School of Arts, Muswellbrook, during February, 1921, "Martindale Estate," containing about 19,720 acres, Freehold, situated at Denman, subdivided into 68 blocks of 150 acres to 583 acres of rich Fattening, Agricultural and Lucerne Land, nearly every block having frontage to the Hunter River, Goulburn River, Martindale Creek, and other running streams. Included in the subdivision are seven complete Dairies.

TERMS—10 per cent. on signing contract, 5 per cent. on completion of transfer. No further payment till end of second year and then the balance in six equal annual payments bearing interest at six (6%) per cent. per annum.

**WEAVER & PERRY Ltd., Sydney, Muswellbrook, Tenterfield, Kempsey, and Dubbo,
HIGGENS, PARKINSON & Co., Denman and Muswellbrook.**

SALE OF LAND AND STOCK.

DISPOSAL SALE OF

**The late Dr. Robert McNab's
KNAPDALE ESTATE**

NEAR GORE, SOUTHLAND,

— NEW ZEALAND —

AT

Theatre Royal, Gore,**SATURDAY, 5th March, 1921**

At 2 p.m.

WRIGHT, STEPHENSON AND CO. LIMITED, in conjunction with **J. E. WATSON AND CO. LIMITED**, acting under instructions from the Public Trustee, Administrator in the Estate of the **LATE DR. ROBERT McNAB**, will offer by auction the **KNAPDALE ESTATE** in two lots at the above time and place. Particulars are as follows:—

LOT 1.—The Homestead Block, comprising 456 ACRES practically all good level land, in excellent order, well subdivided and laid off with shelter plantation. Buildings comprise new modern dwelling, with all conveniences, connected by telephone, new farm steading with stockman's cottage, large wool shed, sheep yards, &c.

LOT 2.—The farm known as "**MARSHALL'S**," comprising 200 acres, well fenced and subdivided, and with all necessary buildings.

Also on

Wednesday, 9th MARCH, 1921

At 11 a.m.

the whole of the Stock and Farming Plant, Household Furniture, &c., including the Knapdale Stud of Shorthorn Cattle, comprising 68 head of Cows, Heifers, and Bulls, including the Imported Bull "**DIAMOND PRINCE**" and "**CUDHAM PURE GOLD**," and the Knapdale Stud of Romney Marsh Sheep, comprising 140 stud ewes, 38 Rams, and about 80 Lambs.

NOTE.—The Knapdale Stud of Shorthorn Cattle and Romney Marsh Sheep is one of the leading Studs in the Dominion to-day, and has met with considerable success at the various Shows in Canterbury and Otago. The foundation of the Shorthorn Cattle was laid by the importation from Aberdeenshire by the late Dr. McNab, of the well-known sire, "**DIAMOND PRINCE**," together with two in-calf heifers, and this was added to by the selection of several additional cows and heifers from the well-known stud of Messrs. R. D. D. McLean and Arch. McLean, of Hawkes Bay; Mr. Gibbston, KIWITEA, Feilding; the old established herd of Mr. Henry Pannett, Springston, Canterbury; and the herds of Robert Crombie and Robert Miller, Otago.

The Romney Marsh Flock was founded in 1911 by the purchase of ewes from Mr. Ernest Short's well-known Parorangi Stud at Feilding. These were mated to Castlerock Rams. The Rams from this Flock invariably top the market at the Ram Fairs each year.

The Horses and Agricultural Machinery are of a very high order, and altogether the Sale offers a unique opportunity for Buyers to secure a first-class stock and plant, and one of the most up-to-date stud farms in the Dominion.

The Land Sale will be held at Gore on Saturday, the 5th March, 1921, and the Stock and Plant will be offered at the Homestead on Wednesday, the 9th March, 1921. Fuller particulars and Catalogues on application to the Auctioneers or to the Public Trust Office at Gore or Invercargill.

SECOND ANNUAL SALE OF**Pedigree Tested Friesian Cattle
and Registered Romney Sheep**

ON BEHALF OF W. D. HUNT, Esq.

At "**BAINFIELD**," **INVERCARGILL, NEW ZEALAND,**On **WEDNESDAY, 23rd FEBRUARY, 1921.****MESSRS. WRIGHT, STEPHENSON AND COMPANY LTD.**

Will OFFER FOR SALE, as above,

**35 BULLS
15 FEMALES****20 STUD RAMS
200 FLOCK RAMS**

NOTE.—Everything being offered is for absolute unreserved sale. Nothing has been, or will be, sold privately. Buyers can therefore depend on having put before them the best that is for sale. The bull calves to be offered are the whole season's crop, excepting one to be retained for stud use. This herd is not surpassed by any in the world. Mr. Hunt founded the herd with the very best cows that could be got, and has added to it regardless of cost. He has continuously tested and improved the herd where possible. Six cows have averaged over 20,000 lb. of milk in one season. The senior herd sire is "Rosevale King Sylvia," 1221 N.Z.F.H.B., by "Netherland King of Rosevale," 360 N.Z.F.H.B., dam "Burkeyle Sylvia Posch" (imp.), 1276 N.Z.F.H.B. N.Z. Government semi-official record, 26,226 lb. milk, 983-2 lb. butter fat—the highest record for New Zealand.

The rams being offered have in them the very best blood obtainable in New Zealand. The whole of the stock is bred and reared in the most southerly portion of New Zealand, close to the somewhat stormy and bleak Foveaux Strait. These severe conditions, however, give the stock constitution and bone, which cannot be produced under milder conditions.

Catalogues are being prepared, and can be obtained on application to the auctioneers, Invercargill, New Zealand.

TO STUD MASTERS AND OTHERS.**TRUSTEES' DISPERSAL SALE**

of the whole of the Renowned

MURGHA MERINO STUD FLOCK

(The Station has been sold.)

Messrs. **WILKINSON & LAVENDER Ltd.** and **McKENZIE & CO.** have received instructions from Mrs. Mary Austin, Administratrix of the Estate of the late A. J. Austin, to submit for **ABSOLUTE SALE** by **PUBLIC AUCTION**, on the Station, **MURGHA**, near **DENILQUIN**, on

THURSDAY, 3rd FEBRUARY, 1921the whole of the well-known "**MURGHA**" FLOCK. In lots to suit Buyers.

The Sheep to be offered will consist of:—

EWES.

714 Extra Special (Labelled) Stud Ewes, hand served by Special Stud Rams
155 Special Stud Ewes by Special Stud Rams from labelled Ewes.
183 First Double Stud Ewes
1427 Double & Single Stud Ewes } all due to commence lambing to Murgha Stud Rams
1182 Second Double Stud Ewes } early in March.
3880 Single Stud Ewes
1646 Ewe Hoggets, not yet classed

RAMS.

10 Extra Special Stud Rams, the leading sires used with the special labelled ewes
250 Special and Selected Stud Rams

The Administratrix of this intestate Estate has carried on business with the consent of the Court since the decease of her late husband, and the period for which this permission was granted has expired. The Station having been sold, she now has to wind up the estate by selling the whole of the assets, hence this exceptional chance to acquire high class stud ewes, an opportunity which has seldom been presented to breeders in the history of the Merino sheep industry in Australia.

The Murgha Flock is an off-shoot of the original Wanganella Stud, and the late Mr. A. J. Austin during his lifetime made purchases of high class ewes and rams from that Stud from time to time.

IMPORTANT NOTICE.

Should the train leaving Melbourne for Echuca at 4.50 p.m. be reinstated, a Special will be run from Echuca to Deniliquin early on the morning of the sale. If not it will be necessary for buyers to reach Deniliquin by train leaving Melbourne at 6.40 a.m. on Wednesday, 2nd February. It is necessary for buyers to instruct the Agents to book seats for them in cars running from Deniliquin to "**MURGHA**" for the sale.

WILKINSON & LAVENDER LTD.

MELBOURNE, SYDNEY, HAY and CARRATHOOL.

McKENZIE & CO.

DENILQUIN, JERILDERIE, FINLEY and ECHUCA.

FOR ABSOLUTE SALE.

In the Estate of the late A. H. Conroy.

“BOGOLARA” STATION

also “OAKEY CREEK” and “JEREMIA.”

STUBBS & CO., Stock and Station Agents, Yass and Sydney, in conjunction with CLIFFORD T. SMITH, Real Estate Agent, of Wentworth Court, Sydney, have been instructed by the Executrix to sell

BY PUBLIC AUCTION

**At the Mechanics' Institute, Yass, on Thursday, 3rd February, 1921,
at 3 p.m.**

(1) “BOGOLARA” STATION.

A splendid investment, good climate, well improved, heavy sarrying.

Situated 20 miles from Bowning and Binalong and 15 miles from Illalong Creek Railway Stations, all on Main Southern Line; 13 miles from Marilba Siding, on Burinjack Railway; 10 miles from Bookham P. and T. Office, with which it is connected by telephone.

Area.—2,240 acres Freehold.

2,361	”	C.P.	} all residence conditions fulfilled.
4,036¾	”	C.L.	

8,637¾ ”

Country.—Undulating to hilly. Timbers, principally White and Yellow Box, Blue Gum, Appletree, and many splendid Kurrajongs and Mountain Oak. Judiciously ringbarked for years, and most dead timber burnt off. **High-class Breeding, Woolgrowing, and Heavy Carrying.** Some good cultivation land.

Carrying Capacity, about one sheep to the acre.

Watered abundantly in every paddock; never-failing creeks and springs, and about 6 miles frontage to Murrumbidgee River.

Rainfall averages 27 inches.

Fencing.—Boundary and eight subdivisions splendidly netted. Seventeen sheep-proof paddocks.

Improvements.—Pise Homestead, six large rooms, Servants' Quarters, Stables, Machinery Shed, Woolshed, Hayshed, Sheep Yards, Dip, Horse and Cattle Yards, Shearers' Huts, Boundary Rider's House, &c. All in good order.

“BOGOLARA” is very well improved, the late Mr. Conroy having spared no expense in netting, destruction of rabbit harbor, fencing and clearing. It is strongly recommended to those in search of a lucrative investment or to the owner of western area requiring a property in one of the safest districts of the State for relief purposes in time of drought, and in close touch with railways.

The elevation is about 1500 feet, and the climate ideal.

(2) “OAKEY CREEK.”

Situated.—Adjoining “Bogolara,” on the South-eastern Boundary.

Area.—487¾ acres Freehold.

1,536	”	C.P.	} all residence conditions fulfilled.
617½	”	C.L.	

2,641¼ ”

Country.—Sound hilly grazing country. All ringbarked and scrub killed many years.

Improvements.—Boundary wire netted, with the exception of three-quarters of a mile. Subdivided into four paddocks by six wire fencing. Sheep yards.

(3) “JEREMIA.”

Situated in the mountains between Yass and Tumut.

Improvements.—Fenced and divided into four paddocks.

Area.—300 acres C.P. and 900 acres A.C.P., being C.P. 05/1 and A.C.P. 15/2, Parish of Ohidowla. All residence conditions fulfilled.

IDEAL RELIEF PROPOSITION.

Further information from the Auctioneers, who will meet buyers and accompany them to inspect:—

STUBBS & CO., Yass and 11 O'Connell St., Sydney

CLIFFORD T. SMITH, Wentworth Court, Sydney

(Auctioneers in conjunction).

Solicitor to the Estate, Mr. FRED. C. EMANUEL, 136 Pitt Street, Sydney.

Stud Stock.

The Official Organ of the "Australian Longwool
Sheepbreeders' Association,"

and

The Official Organ of the "Stud Beef Cattle
Breeders' Association of Australia."

Latest Stock Returns.

AUSTRALIA AND NEW ZEALAND.

	SHEEP.		CATTLE.		HORSES.	
	1919.	1920.	1919.	1920.	1919.	1920.
N. S. Wales ...	37,381,874	28,890,040	3,280,676	2,858,753	722,723	648,469
Queensland ...	18,220,985	17,379,332	5,786,744	5,940,433	759,726	731,705
Victoria ...	15,778,902	14,422,745	1,596,544	1,631,120	523,788	613,500
S. Australia ...	6,625,184	6,014,565	342,768	349,562	269,255	264,901
W. Australia ...	7,183,747	6,697,951	943,847	880,644	180,094	174,919
Tasmania ...	1,841,924	1,781,425	218,234	214,442	41,221	39,452
N. Territory...	47,520	—	490,362	638,431	26,674	26,231
Total Aust.	87,080,136	75,186,058	12,589,175	12,513,385	2,523,481	2,399,177
New Zealand	25,828,554	23,914,506	3,035,478	3,101,945	363,188	346,407
Argentina ...	—	44,850,000	—	27,050,000	—	8,323,815

N.S.W. & S.Aust. returns in each case are to 30th June, 1919, & 30th June, 1920
Q. & W.A. " " " " to 1st Jan., 1919, & 1st Jan., 1920
Victorian & Tas. " " " " to 1st Mar., 1919, & 1st Mar., 1920
N. Territory " " " " to 1st Jan., 1917, & 1st Jan., 1918
New Zealand—Sheep returns only are to 30th April, 1919, & 30th April, 1920.
Cattle and horses are to 31st Jan., 1919, and 31st Jan., 1920.

Forthcoming Shows, 1921.

JANUARY.

31 and Feb. 1.—Palmerston North Ram Fair, N.Z.

FEBRUARY.

1-4—Feilding, N.Z.
8-9—Warwick, Q.
9-10—Dunedin, N.Z.
15-16—Masterton, N.Z.
16-17—Korumburra, (Grand National) Vic.
16-18—Guyra, N.S.W.
22-24—Uralla, N.S.W.
23-24—Tumut, N.S.W.
23-24—Inverell, N.S.W.
23-25—Newcastle, N.S.W.

MARCH.

1-3—Tamworth, N.S.W.
3-5—West Maitland, N.S.W.
4-5—Adelaide, (Autumn) S.A.
8-10—Mudgee, N.S.W.
8-10—Glen Innes, N.S.W.
10-12—Goulburn, N.S.W.
15-18—Armidale, N.S.W.
21-30—Sydney Royal, N.S.W.

APRIL.

13-15—Narrabri, N.S.W.
19-21—Toowoomba, Q.
26-27—Goondiwindi, Q.

MAY.

12-13—Blackall, Q.
31 and June 1-3—Dunedin Winter, N.Z.
18-19—Ipawich, Q.

JUNE.

23-25—Rockhampton, Q.

Old-time Shorthorns.

(By H.B.)

"Mount Gilead," Campbelltown, N.S.W.

It was in 1874 that the name of Mr. E. H. Woodhouse made its meteoric appearance on the bucolic horizon with the phenomenal debut of that magnificent Shorthorn bull Royal Purple 1st at the Sydney Show, and later at the Brisbane and Darling Downs Shows for a number of years, at all of which he was unapproachable. In fact, to parody what was said of that great horse Eclipse, it was Royal Purple first and the rest nowhere so far as the chance of obtaining a blue ribbon was concerned where he competed in a class.

This is another instance of the successful blending of the Booth and Bates strains. His sire was the majestic rich

roan bull Imperial Purple 9th, himself a champion (see later notes hereon).

The dam of Royal Purple 1st was Lucy 3rd, by Marquis of Bute, g.dam Lucy 2nd, by Lord Sale (18274), 3rd dam Lucy 1st (imp.), by Lorraine (14859). In 1875 he was first in Sydney in the two-year-old class, as well as special and championship winner, and was sold to Marshall Slade, Queensland, for 1000 guineas, for whom he sired over 350 calves.

He was an extremely handsome beast, and carried a thick mossy coat, and possessed a magnificent constitution, for notwithstanding the forcing for show purposes he was subsisting on grass in his eighteenth year when he was destroyed, having been unfruitful for some time.

His sire Imperial Purple 9th was a rich reddish roan, possessing great style and carriage, and won in 1872 first prize in the two-year-old class in Sydney, comprising fifteen entries, including six imported bulls, also £20 and silver cup. In 1873 he was again first, and won £20 and silver cup. In 1877, after four years at the stud, he won first prize in the aged class of twenty entries, also special and the challenge cup for best bull exhibited against eighty entries. He stood at a fee of 25 guineas. His sire, Prince of the Purple, was bred by Robert McDougall, and got by Prince of the Purple, imp. (20580), dam Ermen-garde, by Booth's Lord of the Valley (14837). The dam of the 9th was Pet 2nd, bred by Robert Lowe, of Wilbetree, Mudgee, got by the imported Bates bull Middleham (16562); g.dam and g.g.dam were both by Wilbetree, by Consul (1868), the 4th d. (imp.) by Major and the 6th d. by Northumberland (464). A bull which made a great mark in the stud of the late Sir Joshua Peter Bell at Buaraba, Queensland, was Imperial Purple 7th from Pet 3rd, full sister to Pet 2nd. Princess Purple 8th, own sister to the 9th, was second to the champion cow Matilda 10th, Sydney, 1873, sold for 1150 guineas. The Imperial Purple strain of blood won in seven years 150 honours, including twelve champion prizes.

The stud was founded in 1872 by Mr. E. H. Woodhouse by the purchase of the highest class colonial-bred cattle and importations from England, but in 1875 passed to Mr. E. B. Woodhouse. The sires used were Imperial Purple 9th, then Royal Purple 1st before he was sold, then 2nd Duke of Alvie, purchased at the Colac sale for 750 guineas. He was a beautiful roan, winner of two first and one special prize, and was afterwards sold to John Lee, of Bylong, for 1000 guineas, a sure guarantee as to his merit. He was by Duke of Brunswick 2nd, by the famous Duke of Brunswick, imp. (25937), winner of seven first prizes in England, and his dam, Lady Fortunate, received over twenty. The dam of Duke of Alvie 2nd was Letitia 3rd, by The Pop, exhibited three times in Melbourne, and taking three first prizes and two champions. Her dam Letitia, by Sol, was also a prizewinner at the English Royal. Another sire was 5th Duke of Brunswick, a grand dark roan, bred by Richard Morton, Skelsmeigh Hall, got by Duke of Brunswick, imp. (25637), dam Matilda 2nd, by Royal Butterfly 6th (18757), g.d. Matilda (imp.), by Cardinal (14239) sold later to Mr. Wentworth for 1000 guineas.

Unfortunately very few of this once famous cow's descendants are to be met with now, more is the pity. Matilda 10th, own sister to the 5th Duke, having beaten all comers several times, was sold to John Eales for 1150 guineas (the writer bought a red and white bull out of this cow by the 5th Duke). 2nd Duke of Brunswick, full brother to the 5th, was sold for 600 guineas, and later 1200 guineas was refused for him. Matilda 11th was also sold to John Eales for 700 guineas, and another grandson, Cherry Oxford, was sold to Messrs. Manifold for 1000 guineas. Matilda's 2nd Baron was sold in 1877 for 1000 guineas, and many more of her progeny realised high prices, and up to that date they had won more prizes and brought higher prices than those of any other cow in Australia. She died during calving in her 21st year, after leaving behind her sixteen living calves.

Royal Brunswick, a red roan, was bred at Mount Gilead, calved January 1878, got by 2nd Duke of Alvie, dam Lady Brunswick, by Duke of Brunswick (imp.), dam Letitia 5th.

by The Beau. The Beau was out of the celebrated cow Fanny (imp.), her sire the Bates bull Marmaduke (14857), who was also the sire of the grand dam of Oxford Cherry Duke, imp. (32016).

The Beau was also the grandsire on the dam's side of Roan Duchess and Duchess of Rockingham, sold at Colac sale at 2200 guineas and 1050 guineas respectively. Royal Brunswick was sold to Hon. E. D. Ogilvie at 500 guineas.

Owing to ill-health Mr. E. B. Woodhouse decided to visit England, and his fine stud was sold off at Mount Gilead, 24th March, 1883, by Brunner and Wolf, when the sire then in service was offered. This was 6th Duke of Bridgewater, bred by Joel Horwood, of Bridgewater Park, who spent a fortune in establishing herds in the seventies and eighties.

He was a roan, calved October 1881 by Grand Duke of Waterloo, imp. (43320), dam 5th Duchess of Bridgewater, by Duke of Melbourne, own brother to Matilda 10th, and the highest-priced bull calf of his day, g.dam Matilda 5th, by Royal Butterfly 22nd, g.g.d. Matilda 3rd, by Royal Butterfly 6th, sold when twelve years old to Messrs. Chirnside for 425 guineas. Grand Duke of Waterloo was got by 24th Duke of Airdrie (36460), dam Lady Waterloo 28th, by 9th Duke of Geneva (28591).

The females imported by Mr. Woodhouse were:—Princess Helena 2nd, by Great Seal (21873), bred by Mr. Charles Bruce, Broadlands, N.B., g.dam Princess Helena, by Signet Seal (18824), her 15th dam by George (270). Mr. Bruce's herd at Newtown at that time had won 140 first prizes, many seconds, and over thirty gold and silver cups. She produced several daughters to Imperial Purple 9th, and one, Princess Helena 4th, was mated twice with her own sire, producing the 6th and 8th of the name, both very fine cows, and dams of good stock. Nine Helenas were included in the sale.

Mary Anne 11th was another imported cow, by Provost (24879), bred by George Marr, Cairnbrogie, Scotland, winner of first prize at the Royal Northern Show, 1872. Several of her daughters were prizewinners, notably Mary Anne 14th, by Royal Purple 1st. (Mr. Marr's herd was one of the oldest in Scotland.) There were several daughters and granddaughters sold at Mr. Woodhouse's sale.

Lucy 3rd, a roan, calved May 1871, by Marquis of Bute, and bred by Messrs. Wm. Degraives and Co., Coliban Park, Victoria, proved a gold mine to Mr. Woodhouse. Her dam was Lucy 2nd, by Lord Sale (18274), g.dam Lucy 1st (imp.), by Lorraine (14859). She, as stated before, was dam of Royal Purple 1st. She kicked well with Imperial Purple 9th and to Royal Brunswick.

From the same breeders were obtained Becky Sharp, Snowdrop, Countess and Lily of the Valley, by Marquis of Bute. None of these latter, however, were very successful.

Six cows were purchased from that never-to-be-forgotten breeder of neat Shorthorns, Robert Lowe, of Wilbtree, dating back to about 1840. They were known for their high quality and beautiful symmetry, as stated in a former article on that once famous stud. About the best of those which came to Mount Gilead was Nina, by Royal Butterfly 29th, dam Nina, by the Bates bull Middleham, g.dam Tulip, by Wilbtree, by Consul (1868), 5th dam Violet (imp.), by Major. As will be seen on comparison, she was closely related to Imperial Purple 9th, but the latter's dam had a double cross of Wilbtree.

From J. C. Irving, of Tomki, Mr. Woodhouse obtained Constance (roan), Celeste (red), Red Rose of Tomki, Empress (rich roan), and Lady Clark—all by The Baron (288 N.S.W. H.B.); Carlotta (white), Florence (roan), and Isabelle, by Sir Charles; also The Pet, by Duke of Waterloo 1st, and Duchess (red roan), by Praetor (imp.), but all these traced back to colonial-bred pedigrees.

Mr. Woodhouse at the time of the sale in March 1883 also had an excellent herd of pure Devons, bred from stock purchased from Mr. Reynolds, of Tocal, which went back to 1840, and originated with the stock introduced by the pioneering F. H. Hobler, who also introduced the first Herefords from Tasmania, dating back to 1825.

In conclusion, I have to thank my friend, Mr. T. R. McWhannel, of Dalgety and Co., Sydney, for some of the information kindly given me about the sale.

High-priced Stock in 1920.

The appended table gives the individual prices obtained for some of the leading stud animals sold during 1920. The list does not profess to be absolutely complete, but it is full enough to bring to light some rather interesting facts. Probably the first thing that will strike the reader is the number of Shorthorns sold at 3000 guineas and over. It will also be noted that while all the Shorthorn sales recorded in the list were made in Great Britain or South America, about half the Hereford and Aberdeen-Angus deals were completed in the United States of America. As far as dairy breeds are concerned, the bulk of the big sales were made in the States, although it should not be overlooked that extra high prices were on two occasions given for Friesians in South Africa. The year was a wonderful one for record-breaking Merino sales, thanks to the purchases made on behalf of South Africa. Only a few really high prices were paid for British breeds of sheep, and the same applies to heavy draught horses.

SHORTHORNS.

Males.				
Seller.	Name.	Price.	Country.	
W. Angus	Faithful	£9,600	S. America	
A. J. Marshall	Inchfield Clipper King	8,000 gns.	Great Brit	
Mrs. Stewart	Millhills Comet	6,600		
W. Angus	Red Rover	£6,110	S. America	
E. C. and B. Duggan	(An Orange Blossom Bull)	£5,680		
A. J. Marshall	Cluny Royal Mint	£5,240		
	Rosewood Baron	£5,240		
F. L. Wallace	Balcain Dazzler	5,100 gns.	Great Brit.	
J. Durno	Collynie Brave Knight	5,000		
J. Shepherd	Balcain Favourite	£4,800	S. America	
F. L. Wallace	Balcain Cardinal	4,000 gns.	Great Brit.	
Prince of Wales	Diamond Butterfly	4,000		
K. P. McGillivray	Cluny Beau	4,000		
Earl of Moray	Donne Monarch	3,800 gns.		
D. Anderson	Collynie Master Lavender	3,500		
J. D. Webster	Royal Mandate	3,200		
Major C. Behrens	Swinton Rosicrucian	3,100		
Sir R. Cooper	Billington Snowstorm	3,000		

Females.

Late J. McWilliam	Princess Royal 3rd	2,200 gns.	Great Brit.
J. Barnes	Aikhead Rosebud	2,100	"
H. Butler	Fairlawne Broadhooks	2,000	"
Late J. McWilliam	Nonpareil Blanche	2,000	"

HEREFORDS.

Males.

Quesada & Co.	Lame King	£7,890	S. America
W. A. Pickering	Lakewood Fairfax	£6,200	U.S.A.
Late T. R. Thompson	Resolute	5,500 gns.	Great Brit.
(Montevideo Sale)	Aldersend Wilton	£5,476	S. America
W. T. McCray	Lowden Fairfax	£5,000	U.S.A.
Mouzel Bros.	Superior Mischief	£4,400	
Sir J. R. G. Cotterell	Sovereign	4,000 gns.	Great Brit.
(Montevideo Sale)	Lawless	£4,000	S. America
G. F. de Witt	Domino Jnr.	£3,000	U.S.A.

Females.

E. H. Taylor	Clive Iris	£2,770	U.S.A.
W. T. McCray	Lady Donald 1st (with Bull Calf)	£2,540	"

ABERDEEN ANGUS.

Males.

L. E. Kershaw	Plowman	£8,000	U.S.A.
J. Whyte	Perinthian	6,000 gns.	Great Brit
(Buenos Aires Sale)	(Bleaton Bull)	£3,800	S. America
C. Penny	Black Idol	3,000 gns.	Great Brit.
Sir G. M. Grant	Eclintus of Ballindalloch	2,800	
J. Tudor & Co.	Egret	£2,800	U.S.A.

Females.

P. J. Donohoe	Blackcap Lassie	£3,000	U.S.A.
W. H. Cooper	—	£2,000	
D. M. Allen	Pride of Mulben	1,300 gns.	Great Brit.

FRIESIANS.

Males.

A. W. Morris & Sons	Alcartra King Sylvia (2 months old calf)	£10,000	U.S.A.
Morris	King Pontiac Korndyke	£8,200	
	Pontiac Acme	£8,200	
Brown & Fleming	Admiral Beatty	£7,750	Sth. Africa
G. B. Radcliffe	Dunnald Haeayemaarschaap	4,500 gns.	Great Brit.
H. J. Baynes	Nels Rust General	4,000	Sth. Africa
E. R. Debenham	Bladen Lord Verwachting (Calf)	3,100	Great Brit.

Seller.	Females. Name.	Price.	Country.
E. R. Debenham	Bladen Neeltje 3rd	3,100 gns.	Great Brit.
JERSEYS.			
	Males.		
—	Gipsy Gambogie Lad	£4,600	U.S.A.
	Females.		
Edmond Butler	Oxford Mesembryanthemum	£3,000	U.S.A.
—	Green Farm Sybil	£2,400	"
GUERNSEYS.			
	Males.		
F. L. Ames	Langwater Steadfast	£5,000	U.S.A.
	Females.		
W. W. Marsh	Prospect's Rose des Howards	£3,540	U.S.A.
AYRSHIRES.			
	Males.		
Alta Crest Farms	Auchenbrain Tereador	£3,000	U.S.A.
MERINOS.			
	Rams.		
Austin Wanganella Co.	No. 502 and 20 Ewes	6,000 gns.	Australia
H. Collins & Co.	Fealty	4,000 "	"
Estate F. E. Body	Bonnie Charlie	3,600 "	"
F.S. Falkiner & Sons Ltd.	No. 744	3,500 "	"
	Ram by No. 744	3,500 "	"
J. Collins & Son	Royal Charles	2,500 "	"
F.S. Falkiner & Sons Ltd.	—	2,150 "	"
F. B. S. Falkiner	Prince Charming	2,000 "	"
F.S. Falkiner & Sons Ltd.	A9	2,000 "	"
J. Collins & Son	—	2,000 "	"
J. S. Minnaar	Cronje	£1,800	S. Africa
	Ewes.		
Maurice Collins	No. 4	275 gns.	Australia
M. von Below	4 Ewes	each £260	Sth. Africa
Estate F. E. Body	No. C692	£250	Australia
Maurice Collins	2 Ewes	each 200 gns.	"
A. Kingwill	—	£200	Sth. Africa
LINCOLNS.			
	Rams.		
C. W. Tindall	—	1,000 gns.	Great Brit.
BORDER LEICESTERS.			
	Rams.		
A. Findlay	—	£1,100	Great Brit.
	Ewes.		
D. P. Elliott	—	£230	"
SCOTTISH BLACKFACE.			
	Rams.		
C. Chadzow	—	800 gns.	Great Brit.
M. G. Hamilton	—	700 "	"
CHEVIOTS.			
	Rams.		
John Elliot	—	£1,200	Great Brit.
SHIRE HORSES.			
	Males.		
(Pendley Sale)	Ainsty Forest Clansman	2,500 gns.	Great Brit.
"	Pendley Footprint	2,100 "	"
	Females.		
A. R. Grimes	Gleadthorpe Seclusion	4,600 gns.	Great Brit.
(Pendley Sale)	(9-year-old Mare)	£2,400	"
"	Snelston Lady	2,200 gns.	"
CLYDESDALES.			
	Males.		
—	Fyvie Sensation	£3,000	Great Brit.
	Females.		
—	Veda	2,000 gns.	Great Brit.

N.B.— We shall be glad if any reader who notices serious discrepancies in the above list will advise the Editor.

Wanganui Show, N.Z.

For a considerable time the above show has been running at what might be termed very low ebb—so much so that in 1919 it was almost decided to abandon the annual display. In 1920, however, it again revived, and the display was an eye-opener to both breeders and the visiting public. It is doubtful if ever such a fine display of fat cattle has been exhibited in the Dominion, and possibly may not occur again.

The valuable 30-guinea challenge cup, presented by the N.Z. Refrigerating Company Limited for competition in connection with the fat cattle, was won outright by Mr. Hugh Middleton, of Waverley. It was a win thoroughly deserved, especially when one had to contest against such breeders as Messrs. G. F. Moore, Fred Moore, T. A. Duncan, A. T. Wills, Wyley Bros., W. Peat, and Fernie Bros.

The champion fat bullock was owned by Mr. A. T. Wills (Hawera), a massive animal displaying good quality. Its weight was not given, but it could not have been up to that of the third prize animal, exhibited by Mr. G. F. Moore. This animal's weight was a trifle over 1 ton 12 cwt. 2 qrs., or, in all, 3642 lbs. I could not refrain from photographing it alongside a nice quality three-year-old Hereford, Lydia, a first prize winner, also owned by Mr. G. Moore. It is a striking illustration of quality v. quantity. Some very nice pairs were also shown by Messrs. Hugh Middleton and T. A. Duncan.

To further back up the merit of Wanganui's fat stock display it must be stated that the entries in fat sheep and lambs were in all a hundred and eleven.

The pedigree cattle display was also good. There were five exhibitors in the Beef Shorthorn section—Messrs. W. F. Jacob and Son, Jas. Cooper, J. Knight, Miss Watt, and the Moore Hunter Estate. Messrs. W. F. Jacob and Son, with their Palmerston champion, again came out on top, the female award going to the Moore Hunter Estate.

The entries in all classes were twenty-four. The Herefords provided a better numerical display, the entries being forty, exhibited by Messrs. G. F. Moore, A. E. Sandilands, E. M. Cranstone, W. White, J. S. Nelson, Bayly Bros., and Blair and Hunter. Mr. White secured the bull championship with the same animal that won the honours at Hawkes Bay, and Mr. G. F. Moore had his Palmerston North champion cow again a ribbon winner. Mr. J. S. Nelson exhibited a fine first prize yearling heifer. There were fourteen entries in Aberdeen-Angus. Mr. Fred Moore secured both championships.

In sheep, Romneys held pride of place, with seventy-six entries, Mr. Wm. Rayner (Masterton) winning double honours. The same breeder also secured the Lincoln ram championship, out of thirty-eight entries. The Corriedale awards were fought out between Messrs. T. O. Haycock and Fernie Bros., the former winning both championships. The Moumahaki State Farm was the only exhibitor in Ryelands.

The champion draught stallion was Mr. W. B. Campbell's Matatua Buchlyvie.

A Polwarth Flock.

A contemporary gives particulars of the Polwarth flock at Brie Brie Station, near Glenthompson, in the Western District of Victoria. For many years Mr. J. H. Murray bred pure Merinos, but feeling that, with the cutting up of the large estates, the future of that country lies more with the fixed type of comeback, has latterly been devoting his attention to Polwarths. He started by mating two stud Lincoln rams with Brie Brie stud ewes, and resultant progeny were put to station-bred stud Merino rams. The outcome of the cross was a comeback with a dense fleece of fairly strong wool. Two stud rams were then secured from Messrs. Dennis and Sons, of Eeyenk, Mortlake, whose flock has been bred for some twenty-five years from comeback blood. These were put to the Brie Brie comebacks, and breeding on those lines followed ever since. Mr. Murray finds that the Polwarth is more contented and does better on a restricted area than the Merino. Apart from that there is much country in the

Western District and elsewhere which is really too rich for fine-woolled sheep, but is hardly suitable for Longwools. It is there that the Polwarth does particularly well, both as a wool and mutton producer.

New Zealand Sheep in Argentina.

"The Review of the River Plate," under date of 22nd October, refers as follows to a recent shipment of New Zealand sheep received in Argentina:—

"Another consignment of New Zealand Lincolns and Corriedales has just been imported here by Mr. E. St. C. Haydon, who will be remembered as having had a very successful sale last year, when an average of just on two thousand dollars a head was realised for over forty rams offered at auction. The Corriedales are for Mr. Haydon's own flock, though the Lincolns will be offered at auction as soon as they are received from quarantine. The splendid covering of lengthy wool, of a better quality than the true English type, will create interest for their possession, and they are likely to experience a good selling trade. The small frames of these sheep are not in favour of their being more popular here, and New Zealand breeders, if they mean to make a market here, must give more attention to the size and the bone of their Lincolns. The dense fleeces of better quality wool could be grown on stronger framed sheep. Good shanks and better development over their loins would cause them to find more favour with Argentine breeders, who are always disposed to pay high prices if animals of their accepted standard of perfection are obtainable. It is not advisable that they should be as big as the English type, but they ought to be bigger than the ones seen here in recent years."

It is of interest to note that the well-known English breeder, Mr. Clifford Nicholson, who judged the Lincolns at the recent Palermo show in Argentina, made a rather strong commentary on the lack of size in the Argentine Lincolns, and urged on breeders the importance of going in for larger-framed sheep.

Stud Stock Prices in Scotland.

The following figures, published in "The Live Stock Journal," show how well Shorthorns have been selling in North Britain during the past year:—

	1920.		Total.
	Average.		
1,287 bulls	£241 12 10	£310,994	4 10
244 cows	341 2 11	83,239	16 0
92 two-year-old heifers	295 18 4	27,224	8 0
260 one-year-old heifers	251 12 3	65,420	5 0
352 heifer calves .. .	230 4 8	81,042	3 0
2,235	254 2 0	£567,920	16 10

The totals are for the first eleven months of 1920, but as regards numbers and averages are much higher than any previous year. In 1919 a total of 1710 head were sold at an all-round average of £219 10s. 6d., and in 1918 1651 head averaged only £138 13s.

The same paper gives figures relative to Aberdeen-Angus cattle. During the eleven months of last year 2073 head were sold for a general average of £82 16s. 9d., the breed's largest and best trade on record. In the previous year 1746 head averaged £62 10s. 4d., and in 1918 1611 averaged £56 1s. 6d.

British Live Stock Interests.

LONDON, 2nd December, 1920.

Norwich Fat Stock Show.

The opening of the winter fat stock season took place last month, when the 41st annual meeting of the Norwich Fat Stock Show was held. The cattle entries numbered 62, those for sheep totalling 15, and for pigs 17. The quality and finish of the exhibits was excellent, and augurs well for the keen competition that will be seen in the coming winter shows throughout the country.

As the judges could not agree, an umpire was called in to decide on the cattle championship. The supreme award of the show went to the Duke of Portland's two-year-old white heifer Welbeck Lass, as well as the prize for the best cow or heifer in the show. H.M. the King had

ten entries, and took the President's special prize for the best ox or steer, the special prize offered by the Norfolk members of Parliament for Red Polls, and the special prize for the best beast bred and fed in the county.

Jeremiah Colman took the championship award for the best pen of sheep in the show with his pen of Southdown wethers under 23 months old, as well as the special prize for the best pen of shearing wethers (Southdown). Mr. D. Abbott Green's Suffolks were awarded the special for the best pen of lambs.

Southdowns and Suffolks predominated in the sheep section.

Birmingham Fat Stock Show.

The 68th Birmingham Fat Stock Show was held last week end, and is open at the time of writing. The strongest classes have been those for Angus and crossbreds, which were of high quality, and were well filled. These classes provided the champion and the reserve champion.

The supreme award of the exhibition went to Sir R. A. Cooper's Blue Bell, which also took the Elkington Cup and the Thorley Shield; the reserve champion was Mr. J. J. Cridlan's Eros. Among the other special prizes, Messrs. H. Weston and Son's Hereford Bounds Jester won the Webb Challenge Cup for the best beast bred by the exhibitor, as well as the "Birmingham Daily Post" Challenge Cup for the best beast under 2 years. The Maisemore Cup for the best Aberdeen-Angus in the show went to Mr. J. J. Cridlan's steer Eros.

Some prime pens of some of the best mutton breeds of sheep were on exhibition—Southdowns, Shropshires, Hampshires, Oxford Downs, and Ryelands, together with some crossbreds. The late Sir Richard Cooper's Championship Cup fell to a pen of three wether lambs of Hampshire Downs shown by the Pendley Stock Farms, reserve being Mr. R. S. Strouts' Southdowns.

Sales of the Month.

Some important sales of Shorthorns have been held since the despatch of my last London letter. Included in them have been Messrs. John Thornton and Co.'s sale at Reading and Kingham. At the former 73 head from various breeders' herds were sold for £8661 9s., an average of £118 13s. apiece. At Kingham, a periodical sale by the firm, the total realised for 106 head was £9760 16s.; 76 females averaged £100 7s. 2d., and 30 bulls £71 2s. 4d. The top price at this auction was 330 guineas, which was paid by Captain Douglas for Barrington Empress.

The records achieved at the Bean House sale of the late Mr. T. R. Thompson's Herefords, reported last month, were eclipsed at Mr. Griffiths' sale at Aldersend on 4th November. Mr. Thompson, son of the late Mr. T. R. Thompson, paid £3150 for the January calf Aldersend Conqueror—his dam, Carnation, went for £1050 to H.M. the King. The 104 lots averaged £473 10s., the total sum received for the sale being £49,276 10s.—12 cows by Starlight averaged £691.

Another successful Hereford sale was that of Mr. Hawkins, of Thinghill Court, near Hereford, whose 185 lots averaged £117 10s., the sale realising £21,808 10s.

Owing to the death of Mr. G. A. Denny, the Byford Herefords, 80 head in all, sold for £9145 10s., an average of £114. The highest price paid for cows was 500 guineas, which was given by Mr. Owen Williams for Gainsborough Emerald.

At the annual sale of the Red Poll Cattle Society at Reading last month 64 head were disposed of for £9486 15s.; 44 females averaged £176 16s. 2d., and 20 bulls £85 6s. 3d. apiece. The society's autumn show was held at Ipswich, when a keen trade for heifers was experienced. The total for the auctions amounted to £15,216, 80 females averaging £155 apiece.

The top price at the dispersal of Mr. J. B. Dimmock's Shorthord herd of Red Polls was 430 guineas, the 51 females sold realising the sum of £10,202 15s., an average of £200 17s. apiece.

Last month Mr. E. C. Fairweather's entire herd of Shire horses was, amongst others, sold at Peterborough, when some famous animals were put up for auction. In all 23 head were disposed of, Mr. Fairweather securing an average price of £387 apiece. The highest price paid was 3300

guineas, which was given for the massive bay sire Sussex Goalkeeper, after very keen competition.

Suffolk Society's Champion Flock.

Judging for the annual flock competition of the Suffolk Sheep Society was recently concluded, and details are now available as to the results. The championship was awarded to Messrs. Chivers and Son Ltd., whose flock is very strong in its ewes, well grown, and good in the wool. Mr. F. W. Clarke, of Hannam's Hall, was placed reserve for his flock. The Pretymen Cup, given by the president, was competed for by ten lots of ewe lambs. Mr. J. R. Keeble, of Brantham secured the trophy, Mr. Giles being highly commended. The awards for the four classes were as follows:—

Flocks of more than 50 ewes and under 100, Messrs. Chivers and Sons Ltd., Histon; flocks of more than 100 and under 200, Mr. F. W. Clarke, Hannam's Hall; flocks of more than 200 and under 350, Messrs. Webb and Son (Combs) Ltd.; larger flock owners, Mr. Edwin Giles.

Pedigree Stock Exports.

The declared value of the exports of pedigree stock overseas during October, the figures of which have been published since the despatch of my last London letter, is £659,652, which sum brings the value of the exports for the ten months of this year up to £3,892,712. The exports during the month were as follows:—

	No. exported.	Value.
Horses	8,886	£566,614
Cattle	169	50,920
Sheep	426	18,622
Pigs	27	1,364

Of the cattle shipped abroad, the largest number, viz., 77, went to Uruguay, Argentina took 32, Canada 25, and 35 are entered as sent to countries not separately enumerated.

Owing to the import restrictions following the outbreak of foot and mouth disease in this country, no sheep were sent to Uruguay during October; 217 were shipped to Argentina, 76 to Canada, and seven to the U.S.A. "Other Countries" took 126 head.

The s.s. "Waikouaiti," which left these shores for New Zealand last month, had on board a consignment of Aberdeen-Angus cattle which had been selected by Mr. F. Armstrong, of Akitio, for himself and Mr. Hope Gibbons.

Twenty-one bulls and eleven heifers are a recent consignment of Devon cattle sent out last month to the Transvaal Consolidated Land & Exploration Company Limited by Mr. L. S. Meintjes.

Messrs. John Thornton and Co.'s recently published export list gives an interesting record of the destination of many of their recent consignments. Included in the details are the following:—Australia, three Red Poll bulls; South Africa, one Sussex bull and ten heifers, one Cotswold ram; British East Africa, one Short-horn bull; Peru, three Sussex bulls, six Romney Marsh sheep (the last named from Mr. Walter Miskin's Hoo flock), one Short-horn bull from one Shorthorn heifer; Montevideo, 10 Lincoln ewes; Buenos Aires, ten Hereford heifers and one bull (Shucknall Kite); Colombia, ten Oxford Down sheep, three Lincoln ewes (the latter from Mr. Clifford Nicholson's Horkstow Manor flock).

Stud Stock Notes.

SHEEP.

The South Devon Flock Book Association (England) send their Flock Book, Vol. XVII., containing particulars of rams Nos. 15,626 to 16,607, and flocks Nos. 1 to 300.

Mr. J. A. Johnstone, Bushey Park, Palmerston South, N.Z., reports having sold three extra special stud Corriedale ram hoggets at 150 guineas each, and five special ditto at 100 guineas each for export during December.

Messrs. James Sloane and Son, of Mulwala and Woodpark, N.S.W., have sold for the half-year ending 31st December, 1920,

1014 Merino rams in lots, largely to former buyers. Most of these rams were bought without inspection prior to purchase.

Among the Merino sales to South Africa for 1920, not previously published, was a two-tooth stud ram, No. 850, from Estate of the late F. E. Body, Bundemar, Trangie, N.S.W., to Major Beamish, of Moolfontein, Lower Adamson's Bank, for £1000.

Mr. W. D. Hunt, Bainfield, Invercargill, N.Z., will hold his second annual sale of registered Romney Marsh sheep on the property on 23rd February next; 20 stud and 200 flock rams will be offered by the auctioneers, Wright, Stephenson and Co. Limited. Catalogues can be obtained from their Invercargill office. An advertisement appears elsewhere.

Mr. Maurice Collins, Mallett, South Australia, reports the following sales of stud Merino sheep during December:—Three ram lambs, two months old, at 25 guineas each; two ram lambs, six weeks old, at 50 guineas each; also special stud ewe, 1½ years old, No. 4, by Prince Charlie, at 275 guineas. This latter price is probably the world's record for a stud Merino ewe.



The portion marked black in the above map of Great Britain and Ireland shows where the Suffolk breed of sheep has obtained a firm hold, 266 registered flocks in 45 counties.

Messrs. Macfarlane Bros., Wairoa, Narrabri, N.S.W., report having made the following sales of Corriedale rams:—Twenty-five to Mr. F. Gillham, Boggabri; 8 to Messrs. A. V. and C. F. Browne, Albany; 15 to Messrs. McDougall and Son, Wee Waa; 40 to Mr. Charles Binnie, Baan Baa; 40 to Messrs. Scott Bros., Narrabri; one (selected) to Mr. J. H. Kerr, Orange; 8 (selected) to Mr. C. Burton, Boggabri.

Mr. D. M. Aitken has decided to sell by auction the whole of his noted Mahara (Vic.) Border Leicesters, which is probably one of the best studs in the Commonwealth. The sale is advertised to take place at the Newmarket yards, Melbourne, on 27th January, the auctioneers being the Victorian Producers' Co-operative Company Limited. Amongst the rams to come under the hammer will be the champion at the Melbourne Sheep Show in 1918, champion Sydney Sheep Show 1919, and winner of Sire Memorial, Melbourne Royal, 1919.

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Burns, Philp & Co. Ltd., Townsville.
Geo. Ferguson & Co., Port Adelaide.
Henry Willis & Co., Fremantle and Albany.
De Garis Sons & Co. Ltd., Narracoorte, S.A.
AND ALL STOREKEEPERS

Owing to the sale of Murgha Station, Riverina, the whole of the noted Murgha Merino stud flock is to be sold by auction on 3rd February next. The flock is an off-shoot of the original Wanganella stud, and the late Mr. A. J. Austin, during his lifetime, made many purchases of high class rams and ewes from that property. The sheep will be offered in lots to suit buyers. An advertisement appearing in this issue gives all particulars, including advice regarding trains. The auctioneers are Wilkinson and Lavender Limited, Sydney and Melbourne, and Messrs. McKenzie and Co., Deniliquin, N.S.W.

The Co-operative Wool and Produce Company Limited, of Sydney, are retaining the services of Mr. A. L. Morrison to assist them in the active development of their ram business, which was successfully inaugurated at the last Sydney sales. Mr. Morrison will be available to discuss with intending purchasers sheep that are consigned to the company for sale at the annual ram fair, or to treat direct with breeders on behalf of clients. This arrangement in no way affects Mr. Morrison's rights to private practice as regards the classing of flocks, &c. His address is, care the Co-operative Wool and Produce Company Limited, 3 Bent-street, Sydney.

Mr. E. W. Hawker, East Bungaree, Clare, South Australia, reports having sold during 1920 the following stud rams and ewes of pure Bungaree blood:—To buyers in N.S.W.: 150 at 4 guineas, 140 at 4 guineas, 100 at 4 guineas, 80 at 4 guineas, 70 at 4 guineas. Queensland:—9 at 15 guineas, 10 at 10 guineas, one at 10 guineas, 200 at 6 guineas, 50 at 6 guineas, 196 at 5 guineas, and 25 at 4 guineas. West Australia:—25 at 6 guineas, 150 at 4 guineas, 125 at 4 guineas. South Australia:—12 at 30 guineas, one at 25 guineas, four at 10 guineas, four at 10 guineas, two at 10 guineas, one at 10 guineas, three at 6 guineas, two at 6 guineas, six at 5 guineas, one at 5 guineas. New Zealand:—10 ewes at 30 guineas. Several of the above are repeat orders.

Wright, Stephenson and Co. Limited, Dunedin, advise having just completed what is generally regarded as the largest transaction in stud sheep that has ever been recorded in New Zealand. The transaction referred to is the sale of over 600 exceptionally high class Corriedale sheep, chiefly ram hoggets, but including a few two-year-old rams, some very choice ewe hoggets, a small number of superior Merino rams, and two stud Romney Marsh rams. The purchases were made by Mr. G. Stanton Yonge, acting on behalf of twenty-two different interests, Patagonia, Argentina, and the Falkland Islands. His selections were made from the following noted breeders:—Corriedales: Messrs. C. and T. Anderson, Woodgrove; Mr. W. C. Bridson, Woodgrove; Mr. C. H. Ensor, White Rock; Mr. Hugh Ensor, Rakahuri; Mr. J. H. Ensor, Rydal Downs; Mr. O. T. Evans, Woodgrove; Mr. J. A. Johnstone, Bushey Park; Mr. H. T. Little, Woodgrove; N.Z. and Australian Land Co., Moeraki Estate; Mr. A. Telfer, Woodgrove. Merinos: Mr. N. Rutherford, Mendip Hills; Mr. G. L. Rutherford, Connemara; Mr. Jas. Stevenson, Flaxton. Romney Marsh: Trustees of the late T. L. Barnhill, Castlerock. The consignment was shipped at Lyttelton in December by the Shaw, Savill and Albion liner "Mahia." The port of disembarkation is Monte Video.

CATTLE.

The imported Shorthorn bull, Royal Cup, was sold at Mr. C. Smith's dispersal sale, held at Edgewood Farm, Fargo, U.S.A., on 7th October, for £2000.

Mr. K. P. McGillivray, of Clunes Mains, Scotland, is reported to have sold his Shorthorn stock bull, Cluny Beau, to Mr. Joseph Shepherd for export to Argentina for 4000 guineas.

The date of the Cressbrook, Q., sale of stud Herefords has been fixed for 2nd and 3rd March. Particulars of the stock to be offered will be found in an advertisement appearing amongst auction notices in this issue.

Sir J. R. G. Cotterell, Garnons, Hereford, has sold his noted prize winning Hereford bull, Sovereign, for 4000 guineas. Sovereign is by Saladin, the stock bull in the Garnons stud. A son of Sovereign, Royal Fame, has recently been sold at a high figure to Senor Rodriguez, Uruguay.

Captain J. M. Chisholm, Wantalanya, Winton, Q., has sold three Aberdeen Angus bulls to Mr. John Dawson, Mount Landsborough, Winton. The same seller recently purchased one stud bull at Rockhampton by Elate (imp. from Scotland) from Royal Gypsy Rosebloom, and eight heifers from Willangie and Woolooga.

Messrs. W. H. Yelland and Sons, Treverder, Vic., report the following sales of stud Hereford bulls:—True type, Treverder Gladiator, Treverder's Pride, and Treverder's Surprise to Mr. H. Dalley, Buchan; Treverder Vanquisher to Mr. Jas. Lewington, Hinnomungie; Treverder Wonder to Mr. E. James, Coliban Park, Vic.

An important sale of pedigree tested Friesian cattle is advertised in this issue, to be held at Bainfield, Invercargill, N.Z., on 23rd February, on behalf of the well-known breeder, Mr. W. D. Hunt. 35 bulls and 15 females of high quality will be offered for unreserved sale. The auctioneers are Wright, Stephenson and Co. Limited, Invercargill.

Mr. Frank Armstrong, Akitio, N.Z., while in Great Britain, made some very valuable purchases for his Aberdeen Angus stud. He bought some high-priced heifers at the Aberdeen sales, and subsequently three yearling heifers, four yearlings, and one 2-year-old bull, from Mr. D. MacRae, of Ruthven, Kingussie, Scotland. All of them are Ericas and sired by Prince of Nith.

Mr. William Hartnett's large sale of imported Shorthorns was held at Chicago on 27th October, and although no remarkable prices were made the solid average of £332 was secured for 79 head sold. Two bulls, Dandy Broadhooks and Royal Abundance, fetched £1520 each, and another, Lothian May Duke, £1000. The top price for females was £600, given for Tatton Clara.

Mr. J. A. Johnstone, Bushey Park, Palmerston South, N.Z., has purchased from the trustees of the late Dr. R. McNab, Gore, the dark roan yearling Shorthorn bull, Knapdale Diamond Victor. This fine young bull is by the imported champion sire Diamond Prince (3402), out of Te Aute Rose (6201), by Bapton Mascot (2550), and was placed third at the Canterbury Metropolitan Show last November in a strong class of thirty bulls.



MARHAM DAINTY.

A record price two-year-old Red Poll heifer (see note).

The Red Poll heifer shown herewith is Marham Dainty, from the Marham Hall herd, in West Norfolk (Eng.), of Messrs. T. Brown and Sons, who have sold her for a record four-figure price for a heifer of this breed, to Mr. E. C. Lindsay, of Landwade Hall, Exning, Newmarket, who has laid the foundations of a very fine herd. Marham Dainty is a model of the breed, very symmetrical, of lovely quality, and truly typical of the dual-purpose Red Poll. Mr. Lindsay has also bought at a high figure the handsome and well grown yearling bull, Marham Florin, also from Messrs. Brown and Son.

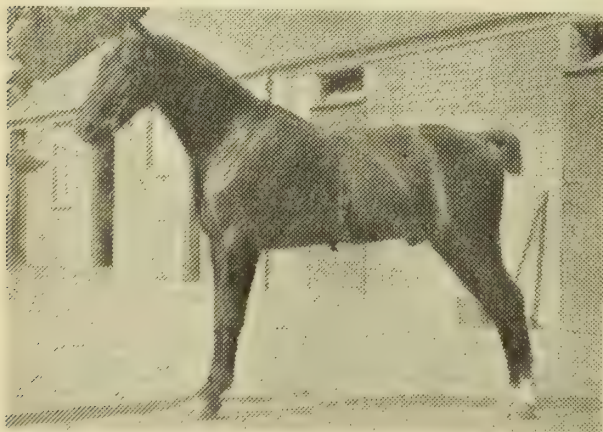
The Governor of South Australia, Sir Archibald Weigall, from the day of his arrival, has taken a keen interest in all matters dealing with rural industries, and has on more than one occasion pointed out how improvements can be made in the breed of cattle. It is, no doubt, through his good offices, that the council of the Lincolnshire Red Shorthorn Society, England, has offered selected dual purpose cattle from the herds of their members as a free gift to the Government of South Australia. This offer has been conveyed to the Government by His Excellency, and has been gratefully accepted by the Premier. It is expected that the consignment of cattle will arrive during the next few months. The Agricultural Department will decide upon the destination of the animals, and their arrival is being awaited with considerable interest by stockowners.

Red Poll cattle are coming out to Australia in increasing numbers, and there are indications that in the near future the trade for these pedigree stock from the Home country will be considerable. Following on the recent importation from England of the record price Red Poll bull, Easton Laughing Fawn, which the New Zealand and Australian Land Company purchased from the Marchioness of Graham, there has now arrived a trio of handsome young bulls from three of the leading herds in the eastern counties. These youngsters include Royal Farmer, who hails from the extensive herd belonging to H.M. the King at Sandringham, where Red Polls have been bred with much success for a number of years. Such a high opinion has been formed of the dual characteristics of this breed, and not least their milking properties, that Red Polls are exclusively kept to supply the Royal household with milk. The other two bulls purchased are Shottford David, belonging to Mr. J. B. Dimmock, of Shot-

ford Hall, Harleston, Norfolk, and Red East, the property of Mr. H. P. Blomfield, of Billingford Hall, Norfolk. All three animals have been acquired by Mr. E. C. McConnel, Marshlands, Wondai, Q.

Messrs. A. J. Hickman and Co., the British firm of live stock exporters, report a wonderfully good year's business, having up to 1st November bought over 150 bulls for export. Many were very valuable animals. One of the best shipments was made in October, when the firm consigned seven Hereford bulls and ten heifers to a buyer in Uruguay. Some were by such famous sires as Starlight, Sovereign, Saladin, and Saxley Controller. To another buyer in Uruguay the firm shipped eight Hereford bulls, including leading prize winners, and to a third ten Hereford and ten Shorthorn bulls. H.M. the King's Devon bull, winner of the championship at the Royal Show in 1919, has been shipped to a Brazilian buyer. Several other high class Devons have been sent to that country, and five Aberdeen-Angus bulls to two different buyers. Mr. A. J. Hickman, who is a breeder as well as exporter, advises that he has in his herd an Angus bull which he believes to be the next best bull in Britain to Etrurian 2nd. It has only been shown once, and won the first and medal. It is by the same sire as the champion and reserve champion females at the last Royal. This bull will be available for export in the English spring.

Dalgaty and Co. Limited, Sydney, report the following stud stock importations during the month:—Two Hereford bulls, bred by the well-known breeder, Mr. Stewart Robinson, Lynhales, Kingston, Herefordshire, England, to the order of the estate late Frank Reynolds, Tocal, Paterson, N.S.W. These are two very fine bulls, typical of the breed. Particulars are as follows:—Courage, calved 8th February, 1919, sire, One Royal (32871); dam, Pearl Oyster by Lord Bob (29864). This is an exceptionally fine bull and a descendant of the well-known Oyster family. Distinction, calved 28th January, 1920; sire, Mansel Handyman (33954); dam, Countess 9th by One Royal (32871). Mansel Handyman was champion of England and sold for 5000 guineas. The animals arrived per the s.s. "Argyllshire" in splendid condition after being nine weeks on the voyage, and they have been inspected and much admired by many breeders. The agents, Dalgaty and Co. Limited, will be pleased to arrange for their inspection at the quarantine station, Abbotsford, Sydney, by anybody interested in this importation. By the same steamer there also arrived three stud Red Poll bulls to the order of Mr. E. C. McConnel, of Marshlands, Wondai, Queensland, bred by the renowned breeder, Mr. J. B. Dimmock, Shotford Hall, Harleston, Norfolk, England. These have proceeded to Brisbane, where they will undergo the necessary period of quarantine. In addition to these there has arrived from America one Polled Hereford bull, on account of Mr. G. H. Horne, of Rockfield, Gladstone, Q., bred by F. W. Drury, Rowan, Iowa, U.S.A.



HACKNEY PONY STALLION, BRAISHFIELD LUCIFER.
Imported by Mr. Charles H. Angus, Collingrove, South Australia.

HORSES.

Messrs. Thomson and Co., of Wai-Rongoa, N.Z., were particularly successful with their Clydesdales at the Invercargill Show, winning all the firsts in the colt classes, and taking the championship for the first time in New Zealand with a two-year-old. The champion was Baron Buchlyvie, by Dundee Duke Lady Buchlyvie, and a particularly handsome youngster. All Messrs. Thomson's exhibits were bred at Wai-Rongoa, where a large sale of Clydesdales is to be held early next year.

Members of the N.S.W. branch of the Clydesdale Horse Society will learn with regret that, for health reasons, the president, Mr.

Ed. Lloyd Jones, has been obliged to resign from the chair. This step Mr. Jones announced at a meeting of the council held on the 7th inst., and that body reluctantly accepted his resignation. Mr. Jones has been a most enthusiastic worker in the interests of the Clydesdale horse and of the society, of which he was an active promoter of the original body, and became its president. He held the position till last Easter, when the amalgamation with the Draught Horse Stud Book was effected largely through Mr. Jones' efforts, and the Commonwealth Clydesdale Horse Society was formed, when he was again placed in the presidential chair of the N.S.W. branch of that body. The society will still have the services of Mr. Jones, who retains his seat on the council.

We publish a photo herewith of the Hackney pony stallion Braishfield Lucifer, recently purchased by Mr. C. H. Angus, of Collingrove, South Australia, in England. This pony is by *Perseus*, dam Tissington Convert. *Fusee* won the champion at London 1917, 1918, and 1920, also champion in harness and Produce Cup last year. His sons won reserve champion, two firsts, one second, one third, one fifth, and his daughter one first and reserve champion at London, and at the Royal his sons won two firsts, champion, and reserve champion. Tissington Gideon (Convert's sire) won the Produce Cup in 1915, 1916, and 1917, and his stock have won numerous prizes. It will be seen that Braishfield Lucifer comes from the most prominent prize-taking ponies in England to-day; he is full of quality, and promises to be a worthy successor to the sires previously imported and used by Mr. Angus, viz., Gallant Crompton and Shirley Free Lance.

GENERAL.

Messrs. Alfred Mansell and Co., exporters of British pedigree live stock, advertise that they are in a position to supply and ship all breeds of horses, cattle, sheep, or pigs. The firm's address is College Hill, Shrewsbury, England.

Australian Population.

ARRIVALS OVERSEA.

—	N.S.W.	Vict.	Qld.	S.A.	N. Terr.	W.A.	Tas.	Total Cwtb.
Total for 1918	26,217	4,695	1,432	393	205	1,117	2	34,061
Total for 1919	39,334	8,762	1,866	2,745	79	4,449	5	57,240
1920.								
First 11 m'ths	60,755	15,285	3,663	3,221	83	5,886	2	88,895
November ...	5,929	1,412	251	163	—	357	—	8,112

DEPARTURES OVERSEA.

—	N.S.W.	Vict.	Qld.	S.A.	N. Terr.	W.A.	Tas.	Total Cwtb.
Total for 1918	26,137	4,379	1,866	387	81	1,312	15	34,167
Total for 1919	45,378	7,548	1,701	1,235	244	2,779	20	58,798
1920.								
First 11 m'ths	60,957	11,222	3,505	2,000	186	3,664	31	81,565
November ...	5,656	983	205	169	14	196	—	7,222

Booming South Africa.

In a recent issue of the London "Times" appears a very large advertisement for capital. It is headed "Own an Orange Orchard in South Africa. The Land of Sunshine." The following exceptional terms are offered:—"An income for life. The farms will be under the full control and direction of a leading horticulturist, who has made a life study of orange growing, and development will be carried out to the zenith of productivity. Five acres of orange trees in full bearing will yield you £500 per year. Three hundred lots for sale at £125 per acre, payable in instalments over a period of five years. Expert growers will plant your ground with 500 of the healthiest and most vigorous trees. The company selling guarantees to plant, irrigate and manage the farm, and accepts full responsibility for the interests of the absentee owner, attending to his or her orchard, and paying him or her regularly the annual income derived therefrom. All farms are freehold and unencumbered, and run contiguous to an ever-flowing great river. Rail routes (2) run within a quarter of a mile of the property. Each plot will be sold, cleared and planted, and the company guarantees the management, gathering and selling of produce in the best paying market." This is something like a progressive arrangement.

Lands.

Queensland Repudiation Act.

A number of additional cases have been heard by Mr. F. K. Heeney, of the Queensland Land Court, under the "Repudiation" Act. The decisions were given at Charters Towers. In the following list appear the previous rent, the commissioner's valuation, the licensee's valuation, and the court's decision:—

Holding.	P.R. s. d.	C.V. s. d.	L.V. s. d.	C.D. s. d.
Balfe	15 0	36 10	17 6	30 0
Valley of Lagoons ..	27 9	71 6	27 9	50 0
Lake Lucy	15 6	36 3	15 6	30 0
Glendon	30 0	56 3	25 0	40 0
Mt. McConnell ..	36 0	71 8	30 0	48 0
Lornslough	31 6	51 4	25 0	40 0
Natal Downs	30 0	32 8	30 0	32 8
Pegurima	37 6	80 8	20 0	57 0
Mt. Elsie	30 0	70 10	20 0	53 0
Harvest Home ..	27 0	53 10	18 0	40 0
Slogan	27 0	35 9	18 0	30 0
Longton North ..	33 9	76 0	22 6	53 4
Longton	25 6	40 6	17 0	35 0
Burke Creek	24 0	56 0	20 0	40 0
Pajingo	30 0	65 0	25 0	50 0
Victoria Downs No. 3	35 3	50 9	30 0	37 6
Rollinson	27 0	58 8	25 0	48 0
Milray	27 9	52 6	22 6	40 0
Nevena	33 9	46 8	25 0	40 0
Corea	27 0	60 0	22 6	45 0
Malakoff	35 3	46 8	30 0	37 6
Helenslee	30 0	62 6	20 0	48 0
Stonington	32 3	79 9	32 3	Adj.
Cornelia	30 0	60 9	12 6	Res.
Victoria Downs ..	32 3	45 4	21 6	40 0
Campaspe	37 6	86 8	25 0	64 0
Wambiana	33 9	93 11	27 6	60 0
Wambiana North ..	36 9	53 8	30 6	40 0
Bletchington Park	33 0	54 2	33 0	35 0
Britannia	25 9	42 0	Adjourned.	
Britannia East ..	27 0	42 0	Adjourned.	
Allan Hills	33 9	78 4	22 6	50 0
Glengalder South ..	26 3	80 8	17 6	40 0
Braceborough	31 6	51 4	24 0	45 0
Braceborough South	31 6	66 0	27 0	55 0
Glenroy	31 6	49 6	21 0	49 6
Glenroy West	26 3	46 5	15 0	46 5
Trafalgar	28 6	62 4	Adjourned.	
Windsor No. 3	26 3	45 4	Adjourned.	
Kivas	40 0	65 2	Adjourned.	
Cardigan	37 6	82 6	32 0	Adj.
Buckland	39 0	73 4	32 0	Adj.
Bosworth	37 6	80 0	32 0	Adj.
Fanning Downs ..	30 0	68 4	25 0	43 0
Windsor	27 0	61 8	17 6	40 0
Redbank	26 3	46 8	18 0	37 6
Eumara	33 0	50 11	45 0	45 0
Powlathanga	30 0	48 9	20 0	48 9
Jesmond	22 6	25 8	15 0	22 6
St. Paul's	27 9	64 6	27 9	40 0
The Bluff	27 0	45 0	27 0	35 0

Land Sales.

NEW SOUTH WALES.

Yolande Station, Coonamble, comprising 5082 acres, has been sold by Mr. H. Stokes to Mr. T. Wright.

Narringa, Hay, the property of the estate of the late John Gibson, has been sold to Messrs. W. and J. Gibson, of Gunbar.

Collaroy Homestead, and block of 17,600 acres of land, situated at Merriway, have been purchased by Mr. H. MacCarthy from Mr. P. H. Morton.

Pine Hills, situated in the Pallamallawa district, has been sold to Mr. J. Rigby, Horsham, Victoria. The property consists of 2880 acres C.P. and C.L.

Vale Beder, near Yass, comprising 6764 acres freehold, C.P. and C.L. land, with 4000 sheep, cattle, horses, and plant, has been sold by Mr. C. S. Maddrell to Messrs. A. and H. Smith.

Ben Buckley Station, Wellington, comprising 8686 acres freehold, C.P. and C.L. land, with 4000 sheep, cattle, horses, and plant, has been sold by Messrs. Martin Bros. to Mr. D'Arcy Osborne.

Bogalara Station, situated on the main southern line, near Bowning, Binalong, and Illalong railway stations, and comprising some 8600 acres of high-class sheep country, is advertised for sale at Yass on 3rd February next. Bogalara is well improved, the owner, the late Mr. A. H. Conroy, having spared no expense in this respect. At the same time **Oakey Creek**, containing 2640 acres adjoining Bogalara, and **Jeremia**, 1200 acres in the mountains between Yass and Tumut, will be offered. The auctioneers are Messrs. Stubbs and Co., Yass and Sydney, and Clifford H. Smith, Sydney.

QUEENSLAND.

Abbotsford, in the Roma district, containing 3250 acres, has been sold by Mr. W. H. Thrupp to Miss Juchau.

20,000 acres of **Tarcombe**, Longreach, have been sold by Mr. A. M. Bowman to Mr. J. Cochrane, of Lochern, Longreach.

Fairview, in the Roma district, containing 1886 acres freehold, has been bought by Mr. W. H. Thrupp, late of Abbotsford.

Greenwood, in the Roma district, comprising an area of 2386 acres, has been bought by Mr. E. J. Beardmore, of Benambra, Mitchell.

Ashling, situated in the Roma district, comprising an area of 48,445 acres, has been bought by Mr. H. L. Kilroy from Mr. H. Crossing.

Langdale, situated in the Longreach district, containing 23,306 acres, together with 11,300 sheep, has been sold by Mr. F. Langston to Mr. J. K. McCrae.

Johnson's Creek, Mitchell, has been sold by Mr. Morgan to Messrs. Hughes Bros., of the Darling Downs. This property was formerly owned by Mr. H. S. Stephens.

SOUTH AUSTRALIA.

10,177 acres of the **Rosebank Estate**, Mt. Pleasant, the property of Messrs. G. T., R. T. and A. Melrose, have been bought by the Government for closer settlement purposes.

A block of 8498 acres of the **Mt. Schanck Estate**, near Mt. Gambier, has been sold by Mr. W. J. T. Clarke to the Government for soldier settlements. The price paid was £6 per acre. 5781 acres of the estate were recently sold to Messrs. Lange Bros.

Publications Received.

Annual report of N.S.W. Sheepbreeders' Association, 1920.

Annual report of Department of Public Lands, Queensland, 1919.

Annual report of Queensland Department of Agriculture, live stock, 1919-20.

From the Ontario Department of Agriculture. The report of the Stallion Enrolment Board for 1920.

From the Commonwealth Statistician we have received the Official Year Book of the Commonwealth of Australia, 1901 to 1919.

We acknowledge receipt of a striking calendar for 1921 from the New Zealand Meat Packing and Bacon Company (Co-op.) Limited.

Annual Report of the Department of Agriculture of the Province of Alberta, Canada, for 1919, from the Minister for Agriculture.

From Houlder Bros. and Co. Limited, London, Submarine Menace. An account of the engagements between many submarines and steamers under the firm's management.

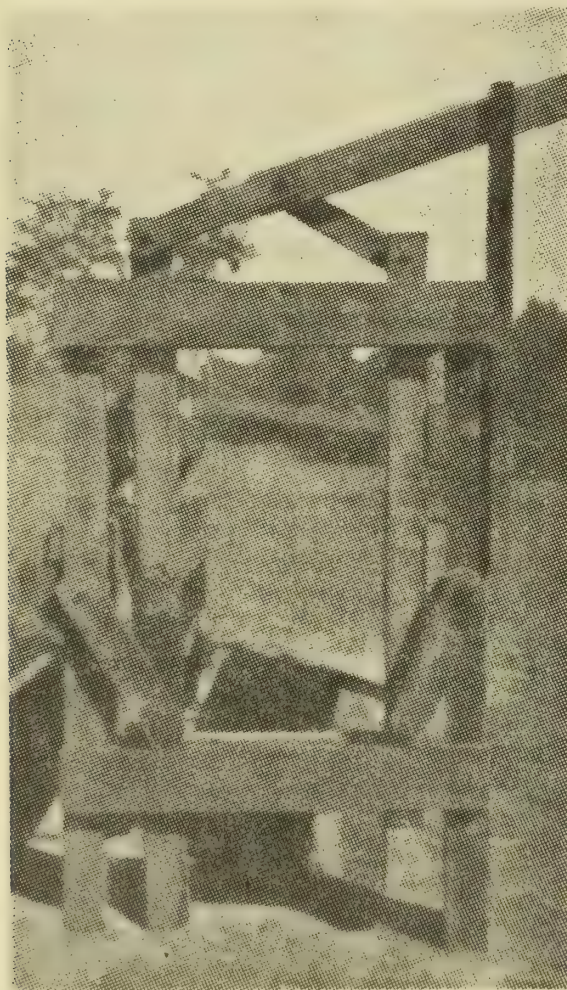
We have received from Mr. Fras. Evelyn Place, B.Sc., B.V.Sc., M.R.C.V.S., &c., Government Veterinary Lecturer, South Australia, a copy of an excellent and invaluable work by him, entitled "First Aid to the Horse." It is clear, practical, and concise, and Mr. Place, by making his knowledge and experience so easily available, has rendered a great service to all horse owners.

Sir Kenneth Anderson, speaking at the 21st annual meeting of the Orient Steam Navigation Company Limited in London, took trouble to show that all was not well in the shipping industry, although his company occupied a most fortunate position. As a matter of fact, the actual trading result this last year was considerably less in spite of the larger capital employed. The ship-owners' chief need to-day was, he said, lower costs as a condition of lower charges. Until they could effect big economies in cost there was nothing for it but to economise in the provision of facilities. Above all, they must economise in speed.

Utility Page.

A Durable Dehorning Chute.

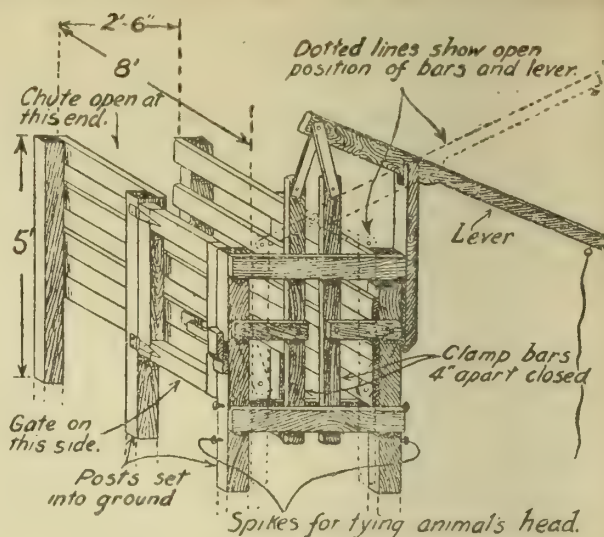
The accompanying diagram clearly illustrates a durable chute for dehorning market cattle, and is of a type in common use in the United States. It can also be used for any other work where it is necessary to hold the animal securely to prevent it from injuring itself or the operator. Sawed material is used throughout according to the diagram, but rough posts, &c., may be utilised if they are strong enough and smooth enough to nail to and there is no danger of splinters to injure the animal or the operator.



DEHORNING CHUTE, WITH HEAD CLAMPS OPEN.

The dotted lines show the position of the lever and the head clamps when open. The latter should be fastened securely, both to prevent them being opened or closed too tightly by the animal's struggles. The pins shown at the side in front are for pulling the head around and tying. The gate at the side is convenient for letting the animal out, and for vaccinating and other work. A similar gate could be placed at the rear panel if desired.

The essential requirement is that the chute should be narrow enough to prevent the animals turning round after they enter it and before their heads are fastened. It should also be high enough so that the animals cannot jump out of it.



SKETCH PLAN OF CHUTE, HEAD CLAMPS CLOSED.

Herefords and Tuberculosis.

The question asked by a correspondent in last month's issue of *The Review* as to whether Herefords are less likely to suffer from tuberculosis than any other cattle was submitted to Mr. G. K. Thorpe, Chief Veterinary Officer of the Metropolitan Meat Industry Board, N.S.W. He says:—

Many people have opinions about the susceptibility of various breeds of cattle to tuberculosis, and they are possibly all correct in that their own particular and limited experiences have led them to form these opinions.

If we realise, however—

- (1) That the cause of tuberculosis is a rod shaped germ;
- (2) The disease cannot be produced except by the presence of this germ in the bodies of cattle;
- (3) A robust well-fed animal is less likely to contract the disease than an animal weakened constitutionally from whatever cause;
- (4) The germ cannot reproduce itself outside the bodies of animals; it dies quickly when exposed to sunlight, but may live for months in manure piles, or in places where it is protected from the sun;
- (5) The disease is very widespread;

it is not difficult to draw certain broad conclusions.

For instance, one would expect to find more tubercular animals among dairy breeds than among beef breeds, because continued lactation is a heavy strain on the system, and the environment of dairy herds leads to more exposure to infection, and so on. I am, however, unable to say whether Hereford cattle are "much less liable to tuberculosis than any other cattle," and very much doubt the reliability of the statement.

If a breeder commences with a tuberculin tested herd, free of tuberculosis, and keeps this herd isolated from all animals subject to tuberculosis, the cattle will remain free from the disease whether Herefords, Shorthorns, or Jerseys, but if he introduces diseased animals into his clean herd, the herd may soon become infected.

Under these circumstances, it is within the bounds of possibility that the Hereford herd might fare worse than the Jerseys, the latter in their previous environment having acquired a greater measure of immunity through closer contact with sources of infection, but the whole subject is rather complex—environment plays so important a part.

Mr. James Gough, one of the founders and directors of the Canterbury (N.Z.) Frozen Meat Company and the New Zealand Farmers' Co-operative Association, died at his home in New Zealand on 28th December, in his 91st year. He took an active part in all public affairs in his district, and was highly respected by all for his sterling character, generosity, and sound judgment.

Record.

Pastoralists' Association of Western Australia.

Our Western Australian correspondent wires under date 8th inst.:—At the annual meeting of the Pastoralists' Association, the president, Mr. Ernest Lee Steere, delivered an able and important address on matters affecting pastoralists generally. He first urged pastoralists to join forces with the country party in opposition to the extreme and thoughtless demands of the Trades Hall, who seem to hold the false impression that every person coming to the State decreases their chance of big wages for little work. He did not propose antagonism to the Nationalists, but the producers were more representative; merchants, traders, and importers could still work in unison with them. He suggested pastoralists should make a levy for the support of the country party candidates or those sympathetic with the interests of the primary producers. They should show that the men on the land are tired of being buffeted about by different sections, all of whom rely upon the woolgrower, wheatgrower, miner, &c., to produce wealth for them to divide amongst themselves.

Among other topics, Mr. Lee Steere mentioned that owing to a strike of Fremantle wool store employees there was a dislocation of the first local wool sales in W.A., involving a loss of £50,000 to woolgrowers as a consequence of the subsequent drop in prices. He also referred to the late attempt of the Government and Parliament to vary the terms of leases and area. The position was very unsatisfactory, for it was eventually decided that pastoralists could appeal to the Government assessors, an appeal from Caesar to Caesar. Mr. Lee Steere was re-elected president, and a strong committee was secured.

A.W.U. Membership Case.

An important case bearing on the rights of a union to refuse to renew the membership ticket of a member was heard before Mr. Justice Harvey in Sydney on 8th December last. A shearer named O'Farrell took action to restrain the Australian Workers' Union and A. Blakeley, E. Grayndler, and W. H. Lambert, servants and agents of the union, from withholding the renewal of his membership ticket and striking his name off the list of members.

It appears that O'Farrell was engaged as a shearer at Gunywarild Station, Warialda, and was a member of the defendant union. In the month of September last he applied to Edward Grayndler, the general secretary of the A.W.U., for a renewal of his ticket of membership, but was informed that he should apply to the secretary of the central branch. Shortly afterwards he forwarded his contribution in accordance with the rules of the union to W. H. Lambert, the branch secretary, with a request that his membership ticket for the current year should be forwarded to him, whereupon the branch secretary refused to accept the contribution or to forward the ticket for the current year or recognise that the plaintiff was still a member of the union.

The affidavits filed in the case disclose that the ground upon which the A.W.U. refuses to admit O'Farrell to membership was because he and others had been shearing during the recent shearing strike on the 48-hour week basis, in contravention to what Lambert alleged was the policy of the union, viz., a 44-hour week. This policy was merely the instructions of the union to its members, contained in a manifesto published by the union instructing shearers and others only to accept work on the basis of a 44-hour week, and prohibiting them from working 48 hours, although 48 hours was the working week as prescribed by the Arbitration Court Award. In addition to which the latest rules of the union, as filed in the Commonwealth Arbitration Court, provide for a week of 48 hours. The question for the court to determine, therefore, was whether plaintiff O'Farrell had not in every respect complied with the award, the agreement, and rules of the A.W.U.

The judge, on consent of the parties, made a declaration that the plaintiff was wrongly excluded from his rights and privileges as a member of the union, and ordered the defendants to restore the plaintiff to such rights and privileges. Defendants to pay costs.

Rabbit Destruction in N.S.W. Landholders' Position.

A case was recently heard in Dubbo, N.S.W., in which J. A. Tink, of Benelong Estate, Dubbo, appealed against his conviction in the Dubbo Police Court on a charge preferred against him by the Dubbo P.P. Board, that he had failed continuously to destroy rabbits on the property. Defendant, on oath, stated that he had spent £1100 in three years in fighting the pest, and he had em-

ployed two men to devote all their time to digging out and destroying and chasing the rabbits with dogs. Evidence was also given that Benelong was fairly clear of the pest, and that all through the drought it had carried a sheep to two acres, and that fat stock had been sent forward from the property all the time the drought lasted and right up till the breaking of the drought. It was contended that this could not be so if the rabbits were numerous.

Judge Armstrong dismissed the appeal, and allowed only £5 costs.

His Honour said that he was quite satisfied that fair and reasonable measures had been taken to destroy the rabbits, but the law was such that if any board was so disposed, it could harass any landholders—it could make it impossible for any landholder to comply with the law as it now stood. He did not say that there had been any harassment in this case, nor was it for him to say that the law needed amending, but it was certainly such that the board could get convictions against anyone.

In view of these comments by the judge, the landholders of the central-west are now agitating for the abolition of the boards, and a movement will be at once started to have the Act amended so that cases like that of Mr. Tink shall not be subject to a conviction.

In the Dubbo Police Court later, several landholders were sued by the Dubbo board for not destroying rabbits, and each pleaded guilty, at the same time affirming that he had done his best, but, in the face of Judge Armstrong's remarks, it was useless to defend any charge.

Stock Droving Case.

A case of considerable interest to graziers and drovers was decided in the Small Debts Court, Charleville, Q., recently, when Chas. R. Lowes and Thompson Ross, drovers, claimed from Joseph Maitland Steele, a Cunnamulla grazier, the sum of £50 for damages caused them by the breach of a contract whereby plaintiffs agreed to drive between 1500 and 1600 sheep from Angellala to Cunnamulla for a sum of £23 per week. Defendant denied any indebtedness, but paid £23 into court in full satisfaction of their claim. It was admitted that the contract had been entered into and that plaintiffs had gone to Angellala with their plant. The sale of the sheep fell through, however, and defendant alleged that the drovers were not ready to take delivery of the sheep. After the failure of the negotiations on the question of compensation, Steele offered £30. This was refused, and at the hearing of the case Lowes swore that he was ready to take delivery of the sheep at the appointed time. The magistrate, Mr. Marcus Gallagher, entered judgment for the plaintiffs for £46 17s. 4d. (including £23 paid into court), and defendant was ordered to pay £2 2s. professional fees, 8s. court charges, and 5s. for Lowes' attendance at court.

The Latest Books.

Lines in Pleasant Places, being the aftermath of an old angler, by William Senior. (London: Simpkin Marshall. Price, 10s. 6d. net.) "Red Spinner's" half a dozen or so angling books, which stand to his credit as "Waterside Sketches," are known to anglers the world over, and they will welcome this volume, which is described as "really and truly" a continuation of the series.

Folk Tales of the Khasis, by Mrs. Rafy. (London: Macmillan and Co.; price, 3s. 6d. net.) The Khasis are a genial and interesting Hill race who live in the central plateau between the valleys of the Brahmaputra and the Surma, and this collection of quaint and interesting folk tales will give pleasure to very many readers. Some of the stories have already appeared in "The Statesman," of Calcutta.

The Death Mask, by Mrs. Everett. (London: Philip Allan and Co. Price, 6s. net.) Fourteen ghost stories, of which the first furnishes the title of the book, are well told by Mrs. Everett. Simply related, no explanations are furnished the reader, and those who care to grapple with the solutions of the problems involved will find the book very interesting, and a record that grips one from the first page to the last.

Stag Hunting on Exmoor, by Alfred Vowles. (Taunton: Barnicott and Pearce; price, 3s. 6d. net.) It had appealed to Mr. Vowles that few people living outside the stag-hunting zones of North Devon and West Somerset seem to possess any practical knowledge concerning the historic sport of the chase of the wild deer and how it is carried on. Hence the present notes, compiled during a sojourn of several weeks after the armistice in a small outpost camp far away in the desert west of Baghdad. Some beautiful photographs are reproduced, notably a rare view of a brave September stag keeping off the pack.

The Diary of a Sportsman Naturalist in India, by E. P. Stebbing. (London: Bodley Head; price, 21s. net.) Mr. Stebbing, who is the author of several other sporting works, was in the Forestry Department of India, and this work contains hunting yarns of his experiences of many types of Indian wild game in the various hunters' paradises to which he was fortunately successively transferred in different parts of India. It is a good record of the conditions of wild-game shooting during the past twenty years or so, and will appeal to all lovers of the hunt for big game.

In the Mountains. (London: Macmillan and Co. Price, 7s. 6d. net.) This careful little story, told in the form of a diary by an anonymous author, is a charming little work. The scene is in an isolated Swiss mountain chalet, 5000 ft. above the sea; the writer a woman broken by some disappointment in love, who has returned with her sorrow to her mountain cottage which she left abruptly on the commencement of the war. Her diary is splendidly written, revealing rare touches of humour and vivid portraiture of the hearts and minds and emotions of the people with whom she comes into contact.

A History of the English Agricultural Labourer, by F. E. Green. (London: P. S. King and Son; price, 12s. 6d. net.) All who are interested in the problems of the land will welcome this work of Mr. Green's. The author has himself tilled the land for many years, and he has endeavoured to survey rural England from the standpoint of the farm worker. The book is a useful contribution to the study of these problems, and the text is strongly fortified with a series of valuable appendices, in the compilation of which the author has had the assistance of so well-known an authority as Sir Henry Rew.

Wild Life in Canada, by Captain Angus Buchanan, M.C. (London: John Murray; price 15s. net.) We recently noticed Captain Buchanan's "Three Years of War in East Africa," and this last volume adds to our admiration of the man and his work. It is a record of an expedition to the almost unknown regions of British North America, beyond the white man's frontiers to Saskatchewan. Obviously Captain Buchanan set out to collect birds for an ornithological collection, and he records his study of the animal life, the flowers and birds of the far north with a broad, free outlook that will interest layman and naturalist alike.

About Others and Myself, by Major-General Sir Archibald E. H. Anson, K.C.M.G. (London: John Murray; price, 10s. 6d. net.) A plain record typical of the man, which provides much good reading, and is illustrative of the kind of work which has made the British Empire what it is to-day—such is this volume by Major-General Anson. The author joined the Royal Artillery in 1844, and his full narrative covers his personal experiences in the Crimean War, in Mauritius, Madagascar, and the Straits Settlements—experiences frequently of personal danger in distant countries that make excellent reading. The work is furnished with numerous pictures and prints, the frontispiece showing the writer himself, who is still alive, looking particularly active at 93 years of age.

The Glamour of Prospecting, by F. C. Cornell. (London: Fisher, Unwin. Price, 21s. net.) Mr. Cornell's romance—for no other word can adequately describe this fine volume—is plainly told, the plain story of a plain man. His searches nearly always ended in disappointment, but the records of his expeditions paint a picture of the man and his sufferings that is ineffaceable. He went to Namaqualand and elsewhere in Africa in pursuit of copper, gold, diamonds, and emeralds. He had astonishing adventures, and went through the most incredible hardships among waterless deserts, rocky wildernesses, and unexplored mountains. He obtained special permission to prospect in the forbidden Kalahari Game Preserve, and explored the little known falls of the Orange River.

Spanish and Portuguese Romances of Chivalry, by Henry Thomas. (Cambridge: University Press; price, 25s. net.) A course of six lectures on Spanish and Portuguese romances of chivalry delivered at Cambridge University in the spring of 1917, form the basis of this book, and these have been extended in order to provide a comprehensive review of a remarkable popular literary movement which, beginning in the Iberian Peninsula in the 15th century, spread over western Europe and flourished, and died away so completely that it is practically forgotten by everyone nowadays excepting students. The many ways in which these Spanish romances are related to earlier and later stories are ably recorded by Mr. Thomas, and readers will find much good entertainment in the book.

Books Every One Should Read.

A Straight Deal: Owen Wister.

The Clarion: Samuel Hopkins Adams.

Peter Jackson; **Cigar Merchant**: Gilbert Frankau.

The World's Meat Future: A. W. Pearse.

Sheep, Farm and Station Management: E. H. Pearse.

Publishers' Department.

THE SOUTH AUSTRALIAN LAND, MORTGAGE, AND AGENCY COMPANY has declared an interim dividend of 20s. per share.

THE AUSTRALIAN PASTORAL COMPANY LIMITED declared a dividend of 6 per cent. for year ending 30th June, 1920, free of taxation.

THE PEEL RIVER LAND COMPANY show a profit for the year of £56,411. A final dividend of 5 per cent. has been declared, and £20,411 carried forward.

THE ABERDEEN LINE are building two new steamers, the "Sophocles" and "Diogenes," for their Australian trade. Both will be over 14,000 tons.

THE UNION BANK OF AUSTRALIA LIMITED has declared an interim dividend of 15 per cent. per annum, equal to 7s. 6d. per share, payable on 28th January.

Among the new school notices appearing this month among the advertisements will be found that of **TRINITY GRAMMAR SCHOOL**, Dulwich Hill, Sydney.

THE SCOTTISH AUSTRALIAN INVESTMENT COMPANY LIMITED for the year ended 30th June, 1920, showed a profit of £110,639. The dividend is 10 per cent.; £25,000 is added to reserve fund, and £48,139 carried forward.

THE AUSTRALIAN, MERCANTILE, LAND AND FINANCE COMPANY LIMITED is issuing to shareholders 60,000 new £5 shares in proportion to one new share for every two held. This will bring the paid-up capital to £900,000 in 180,000 shares of £5 each.

THE GRAZIERS' CO-OPERATIVE SHEARING COMPANY LIMITED, 25 O'Connell-street, Sydney, during its first two seasons took 110 contracts, and shored a total of 1,702,000 sheep. The company invites inquiries for 1921 shearing by means of an advertisement appearing in this issue.

THE LONDON PRODUCE COMPANY LIMITED, 6 Holborn Viaduct, and at 31 North John-street, Liverpool, is now an advertiser in *The Review*. The firm invites consignments of frozen meat, tallow, wool, pelts, canned meats, premier jus, hides, &c., for sale on commission. Liberal advances are made against shipments.

Artesian Boring Notes.

NEW SOUTH WALES.

Bores under construction 1st January, 1921:—

Government:—Burren, No. 2, 751 ft. in shale.

Private:—Dunumbra, 2176 ft. in shale; Mogil, 2405 ft. in shale; Quabathoo, No. 3, 2313 ft. in hard sandstone.

QUEENSLAND.

On Bladensburg, Winton district, water was struck at 805 ft.

A bore put down at Torrens Creek, Q., struck 18,800 gallons flow at 130 ft.

Armravnald, Cloncurry.—Two bores have been finished on this property, one at 1950 ft. and one at 2180 ft., 80,000 gallons per day being struck at the former. A third bore is now down 1900 ft.

A good supply of water, estimated at 24,000 gallons per day, has been struck at Mount Stewart, on the Mackenzie River, Central Queensland, at a depth of 175 ft. The property is owned by the Fitzroy Estates.

Baker Bros., of Gowrie Station, Charleville, report that on their Tongy Station, near Bollon, they struck a flow of 30,000 gallons at 930 ft. in the No. 3 bore. Another flow is expected at 1800 ft., and the big flow at 2200 ft.

WESTERN AUSTRALIA.

Messrs. Davis, Hankinson and Co. have completed their No. 3 bore on Wooramel Station. The bore is 1237 ft. deep, and has a flow of 1,500,000 gallons of good water.

On Boolathana Station the bore that is being put down by Messrs. Davis, Hankinson and Co. has reached a depth of 3200 ft., and the flow is at present 700,000 gallons.

ALL OVER
AUSTRALIA
NEW ZEALAND
&
THE WORLD

THE PASTORAL REVIEW

Expert Information and Statistics on the World's Wool, Meat and Produce Trades.

The Organ of the Live Stock and Agricultural Industries.

NUMBER 2.

FEBRUARY, 1921

VOLUME XXXI.



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THE PASTORAL REVIEW.

A JOURNAL AND A RECORD

Of all matters affecting the Pastoral and Agricultural Interests throughout Australasia.

No. 2.

FEBRUARY 16, 1921.

VOL. XXXI.

Agents and Correspondents.

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Cable address, **Pastoral, Melbourne.** Code, A.B.C. 5th edition.

Sydney: Bligh Chambers, 10 Bligh-street.

GREAT BRITAIN—

Joseph Raymond, Manager, Weavers' Hall, 22 Basinghall-street, **London, E.C.**

Cable address: **Woolshed, London.** Code, A.B.C. 5th edition.

Stock Advertisement Agent—

W. W. Chapman, Mowbray House, Norfolk-st., **London.**

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SOUTH AUSTRALIA—Adelaide: David J. Gordon (Evans and Gordon), Brookman Buildings, Grenfell-street.

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TASMANIA—Campbell Town: C. F. Pitt.

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SOUTH AMERICA—Buenos Aires: Australian, Mercantile, Land and Finance Company Limited (R. E. Bailey), Calle Cangallo 315. **Punta Arenas:** C. Constanduros, Calle Valdivia 782.

U.S. AMERICA—British and Colonial Press, Inc., Cunard Building, 140 Dearborne-street, Chicago, Ill.

AFRICA—Cape Province: Butler Bros., Cradock. **British East Africa:** T. A. Wood, The White House, Nairobi.

Editorial Notes.

Among the special articles this month to which special attention is drawn are the following:—Federal Income Tax and Taxation of Wool Dividends, by a taxation expert; The Cattle Industry in Australia and South Africa Compared, by a breeder who has had experience of both countries; Shorthorn Types (illustrated); Stomach and Intestinal Worms in Sheep, dealing with a trouble that is somewhat prevalent at the present time; and Rabbit Extermination and Federal Income Tax. The very interesting account of a motor trip to Central Australia is carried another stage, and gives an excellent idea of the leading features of this almost unknown portion of the continent. Other subjects of

interest that are included in this issue are Wireless Communication for out-back stations, the Popularising of Sheep Shows, Jackal Plague in South Africa, the True Story of Rosenthal Station, Water Finding, Areas in the Northern Territory for Pastoral Lease, Paraguay, Live Stock Position of the World, &c. The illustrations are exceptionally good, and contain some beautiful pictures, especially two full pages, one showing a Harvesting Scene in New South Wales, and the other Zebu cattle in Cuba. There are also interesting snapshots from Central Queensland Stations, from Mundrabilla Station, one of the most isolated properties in Australia on the Western Australian border, close to the shores of the Great Australian Bight, two pages of very good photos of some of the champion cattle at the last Palermo Show, Argentina, and other pictures from Tasmania, Victoria, and the far north-west of New South Wales. Wool, meat, agricultural, land and stud stock sections as usual deal fully with current matters, and among letters to the Editor are a large number of valuable contributions from practical men. "Fife and Drum" discusses the yearlings to be offered at the forthcoming Melbourne sales, "Gnome" gives a very expert report on the numerous entries at the recent Sydney Motor Show, and "H.B.," another of our regular contributors, writes at length on Victoria Downs Shorthorns, the well-known herd established at such expense in Queensland by Messrs. Lord Bros.

* * *

With the reopening of wool auctions throughout Australia, one's thoughts turn to the prospects of wool values immediate and in the future. As to the first, there is cause for doubt, as it seems impossible that wool should be excluded from the downward tendency that applies

Wool Prospects.

at the moment to all produce throughout the world at large, but there is no reason to think such should be a continuing factor. On the contrary there are good grounds for believing that fine wools at least are not likely to see a return to the average of prices ruling between say 1901-2 to the war period. Much is being made of the duty which it is thought will be placed upon the import of wool into U.S.A., but that is no new development. As a matter of fact, when the last duty was in force, American operators were unapproachable on certain classes of wool required by them, and in all probability will be so again. During the years which saw wool admitted into the United States free, that country did not increase her stocks of fine wools, events preventing her doing so, even had she so desired. It will be accepted that wool, per se, is in common with other primary products created by conditions outside of mere human control, its growth and development being influenced materially by climatic conditions. Every country produces something to better advantage than any other, and it may be claimed that

Australia's great asset is her capacity to produce Merino wool. Similarly New Zealand produces a type midway between a Merino and a Longwool, which enjoys a reputation of its own. Nothing to take the place of wool has yet been evolved, and it is, and ever will be, a human necessity. That being so, it only requires a return to normal conditions to see a revival of normal demand. Whatever comes out of the industrial unrest which affects the world, this will at least be accepted, that the worker—in the full sense of that often abused term—will not go back to the same state as existed prior to the late war, or that awful event will have taken place for nothing, an unthinkable contingency. Good wages mean a fair spending capacity, of course in moderation, not the feverish extravagance of the past year, and wool manufacturers must naturally benefit. No, there is nothing to fear in the future, but there is every reason to maintain our reputation for the production of high-class wools, so that the fierce competition which an impoverished world must face will hold no terrors for the Australian and New Zealand woolgrower.

* * *

Our English wool correspondent reflects in his letter this issue the distaste with which the proposals for the establishment of a British-Australian association *The Wool Realisation Association*. "carry-over" is regarded in Yorkshire trade circles. He says: "... the trade here does not like the spirit of dictatorship which seems to be behind the whole scheme. . . . No regard seems to be paid to the operation of the law of supply and demand. . . . There will have to be a vast alteration at the manufacturing end of Great Britain's trade before liberal buying can be done in Australia and New Zealand, and the removal of 2,000,000 bales without a corresponding increase in business will be of little avail in stemming the downward course of wool values." These remarks indicate a totally wrong conception of the purposes for which the association has been formed, and which have been approved by the British authorities. Firstly, there is absolutely no element of dictatorship, actual or intended, in the scheme. Any attempt to impose high prices would be absurd and impossible owing to the present conditions of the market and finance. We know we must sell cheaply, as most of the other wool-producing countries of the world are just as anxious to get rid of their wool as we are. Secondly, an observance of the law of supply and demand is the basis of the whole scheme. We know that there is a strong movement at home for an economy campaign in political administration, and the fact that the 2,000,000-bale carry-over is under political control renders it liable to a process of jettisoning or sacrifice—regardless of the law of supply and demand—in obedience to the public demand for Government economy, which might very conceivably take the form of closing down the Ministry of Munitions, the controllers of the wool. Finally, there is no intention of taking the 2,000,000 bales off the market, as our Yorkshire friends seem to think. This again is ridiculous. We are more anxious than ever to get rid of the wretched incubus, and if Yorkshire thinks we can afford to tie it up and make a national ornament of it for an indefinite period, they must have a strangely inflated opinion of our financial strength. The sole purpose of the association is to restore confidence in financial circles by taking the wool out of the hands of political control, thus giving stability to the market, which is all that is necessary to ensure the raw material going into consumption at a rate regulated by the law of supply and demand, the very factor which the scheme is accused of ignoring. A stable market is what we want, and

what we would never get as long as there was a chance of the British Government being forced to dump the great surplus overboard in response to the pressure of public opinion. High prices we are not seeking, and cannot hope for. It needs no acute intellect to realise that any anticipations of such are destined to strangulation at birth.

* * *

We sometimes wonder if the woolgrowers of Australia and New Zealand realise what they owe to their various selling brokers for the services the latter have rendered to the industry as a whole during the last few difficult years through which the trade has been passing. There

is an inclination to give all the credit for what has undoubtedly been a wonderful piece of business administration to the Central and State Wool Committees in Australia, which to the average grower are entities that convey little or nothing beyond the impression that they have been practically the controllers of his financial destiny for a number of years. He may have realised the composition of their personnel, that the selling brokers had representation on them, but he has probably regarded them as only there to watch their own interests, a perfectly natural proceeding. On the other hand it may never have dawned upon him that the selling agents have throughout placed the grower's interests first. Every step that has been taken, every scheme proposed and put into practice, for the disposal of the wool to the best possible advantage, has been very largely the fruit of the brains and experience of the men who have built up and carried on our intensely efficient selling trade. By word and deed they have backed up the grower right through, and the amount of extra work entailed as a result of the scheme under which the clip was sold to the British Government must have been enormous; yet it has been carried through by the selling brokers with the utmost efficiency and despatch. It may be said that this is only as it should be, being part of the brokers' business and in their own interest, which may be quite true, but it does not alter the fact that the grower has benefited accordingly, nor must it be forgotten that throughout the war the brokers made no increase in their selling charges for the extra services rendered or to meet their own increased costs. No one could have blamed them if they had done so. They have played the game right through, they have asked for no kudos, their work has been unobtrusive but invaluable, and it would be a graceful act on the part of the growers to place their appreciation on record.

* * *

With the opening of the frozen beef export season in Queensland, cattle owners in that State are having brought home to them the fact that wool is not the only commodity difficult to sell at the present time. Hides and tallow are such a drug on the market that exporters find

it impossible to pay prices for fats equivalent to those given last year. It is understood that the companies are offering from 5 to 10 per cent. less, a serious reduction, and one which cannot well be avoided as long as the essential by-products of the works remain in the doldrums. Beef, when released from control in Great Britain a few months hence, may improve in value, but until it does shippers are likely to buy on a conservative basis. The slump in hides and tallow last year left many of the meat works proprietors in an uncomfortable position, and there still remain large stocks of both in the State that are unsaleable at a reasonable figure. The Government, by following its usual piratical tactics of commandeering a considerable proportion of the killings for local consumption at a low price, is not improving the position. The one ray of sunshine is the season. That promises to be good.

The regulations governing the introduction of cattle from Queensland into New South Wales provide that ordinarily those from certain areas must be subjected to two dippings, viz., one in the locality of origin before starting, and one on the border. It was some time ago decided, however, as a special concession (on account of drought, meat shortage, &c.), that fat stock going to Flemington (N.S.W.) market for sale might come in on the one dipping, on the understanding that they would be slaughtered at the Homebush Abattoirs or other metropolitan slaughtering place within a few days of sale. This concession was arrived at after careful consideration, and it was thought that no danger could result from the practice, as they were only admissible from areas in Queensland understood to be clean, and after special inquiry and certification there. However, the privilege was abused, and it came under the notice of the Department of Agriculture that many lots of such cattle, for which permits had been issued from Wallangarra to Flemington, had been diverted to other destinations, thus getting beyond observation and control, and creating a distinct source of danger to the State. It was therefore decided to revert to the original regulations, whereby cattle from these sources have to be dipped on the two occasions. Since the hot weather set in, with say a humidity temperature of 85 deg., a large number of deaths have occurred, and a large amount of controversy has resulted. The Chief Inspector of Stock denies that the dip caused the deaths, and claims that they died from heat apoplexy. He also said that they were subjected to wretched treatment after dipping, spending two or three days in the train en route to the saleyard. We absolutely agree with the inspector, Mr. Symons. These cattle, after dipping, should have a spell of at least three days before being trucked, should receive a shower at least once a day en route, and should be treated as they would be in other civilised countries. Moreover, they should be landed at the yards in under 36 hours, or the railways should be responsible for any loss after that time. As regards stock carriage the railways are, and apparently ever will be, absolutely out of date. Improvement may be claimed to have been introduced, and those who know no better think them up to date, but as a matter of fact our system is antediluvian.

* * *

The rapidity with which the Merino has decreased in New Zealand of late years is beginning to cause some concern. In 1910 there were 1,868,805 stud and flock Merino sheep returned, 1,063,491 in 1917, and 803,589 in 1920, while the total number of sheep in the Dominion was almost

The Merino in New Zealand.

the same last year as ten years previously. In fifteen years the Merino flocks have decreased by about 60 per cent. The decrease has been brought about by the increased use of half-bred sheep, either first cross (Longwool and Merino) or in-bred, such as Corriedales. Half-bred wool has for some years been considered in the South Island as the description that would meet with the least fluctuation in the markets, and the mutton of these fine crossbred sheep gave the highest quality for the frozen meat trade. The subdivision of the large grazing runs in high country has also tended to the substitution of crossbred sheep for Merinos. The matter of the depletion of Merino flocks was brought before the executive of the New Zealand Sheepowners' Union by Mr. T. D. Burnett, M.P., but nothing was done beyond promising assistance. What is really wanted to improve and increase the Merino flocks in New Zealand is a large infusion of new blood from Australia. Several Merino breeders have regularly imported rams from this source, but their numbers are limited, and shipping freights and other troubles are no doubt at present against shipping consignments of ewes. The necessity of restocking in Australia, where flocks have been depleted by drought, also affects the question of prices. The fact remains, however, that at the present time Merino wool is selling so much better than anything else that it will for the time being check any further decline in the New Zealand Merino flocks.

L. L. Heller, of the National Woolgrowers' Association (U.S.A.), writing in "The Breeders' Gazette," says:—"No intrinsic value can be added to wool by classing. The most that may reasonably be expected from a more businesslike preparation of our clip is a closer approximation of its market value, which will put us in a better position for bargaining. The Australian system of classing is an artificial method of preparation originally designed to conform with the American tariff on wool. A specific duty of a certain sum per grease pound made it most profitable to export to the United States only the lightest shrinkage fleeces and the lightest parts of these fleeces." This is truly damning with faint praise, but if United States growers are content to pin their faith to Mr. Heller's statements, it is their "funeral." As a matter of fact, it is only another shot in the National Woolgrowers' Association's campaign against the introduction of Australian wool or Australian methods of marketing wool into the United States. Of course, classing adds no intrinsic value to wool, but it does—as Mr. Heller admits, though in a very roundabout way—add considerable market value, and it pays well. If growers in Australia had found that classing their clips was a losing proposition, there would very soon have been a large number of classers looking for a new profession. As it is, their hands are full. It stands to reason that the buyer will pay a better figure for a line of wool which he knows to be well and truly classed than for the pig in a poke of a mixed and jumbled lot, on which he has to make an allowance for loss, and which will have to be classed at the mill. As for the tale that Australian classing was originally designed to meet the American tariff, it is utterly puerile. The Australian wool-grower realised the value of careful classing years ago, and was held up by American authorities during their participation in the late war as one to be followed in this respect by U.S.A. wool producers.

* * *

No man needs to be told that the financial situation in Australia is at present in a somewhat delicate state of health, or that money is scarce and hard to borrow, but there are many who fail to realise the why and the wherefore of it and the necessity for very careful navigation through the shoals over which we are sailing. Mr. W. F. Jaques, a well known member of the executive of the Graziers' Association of N.S.W., and chairman of the Pastoral Finance Association, in an interview in the "Sydney Morning Herald," gives one very good reason for the financial stringency. He says:—

"Wool sale figures for the current season, when compared with the corresponding results of last season, help to explain why the local money market is dear and difficult. Since 30th June, 1920, only 88,129 bales of wool have been sold at auction and privately in the Sydney centre, whereas for the corresponding period of the previous wool season, 397,623 bales were appraised. For the 397,623 bales close on £8,000,000 was paid. For the wool sold to date this season about £2,000,000 has been received. This means that something like six millions less has come into the Sydney banks this season, compared with the last wool season. Probably by the end of February the wool money for the 1920-21 season will be £8,000,000 short of the wool money for the corresponding period of last season. This is for New South Wales alone; all the other States tell a similar, or even worse, story. All this means that the banks have so much less to lend their customers to carry on industry. When a man approaches the financial houses to-day for money to be used within the State he is faced with the fact that there is a severe shortage of money—partly because of the comparative failure of our wool sales. The position is accentuated, of course, by the large demands from the primary industries during recent years because of the drought. But the crucial factor is the comparative lack of wool money. Last season the appraised value of the New South Wales wool clip was close on £17,000,000. Half of the current season has gone by, and only £2,000,000 has been paid for our wool."

Mr. Jaques puts the position very clearly. Ignorant people talk a lot of nonsense about "seizing the banks," "forced loans," &c., but it is obvious that the money is not in the

Mr. Jaques puts the position very clearly. Ignorant people talk a lot of nonsense about "seizing the banks," "forced loans," &c., but it is obvious that the money is not in the

country, and we have simply got to wait till we sell sufficient of our products to ease the situation. Such being the case, we are compelled to realise that while the shortage lasts, we must do the best we can with the little money that is available—in other words, we must economise. We have urged voluntary economy for many months, now we are beginning to find that it is being forced on us willy-nilly by inexorable economic laws. It will prove a very salutary lesson, both to individual and Government alike.

* * *

The Government and the people of Queensland are called upon to make a very important decision concerning the settlement of a tract of three million acres in *Settlement Project* in the Upper Burnett by ex-service men from *Queensland*. overseas and others. For some years past the Labour Government has appeared

to be more bent on establishing State enterprises of doubtful utility; now it has suddenly turned its attention to a national scheme of land settlement of a fertile tract only carrying stock. The Commonwealth Government will probably be prepared to lend the State Government a sum of £2,000,000 for railway construction in the area, and to supply as many immigrants as are required to man the farms to be made available. The settling of 16,000 immigrants in this area must be regarded as greater than a State matter. It offers a much more attractive proposition than the proposal to sink £3,000,000 in iron works at the northern port of Bowen. The scheme is likely to be assailed from within and without the Labour Party. Already a commencement has been made by the little Queenslanders. Within the party the Premier and his colleagues will have to contend with the section who believe that immigration means more unemployment; who shut their eyes to the teachings of every country that the greatest period of prosperity is the one in which there has been a vigorous policy of immigration. The Government will also have to face that extraordinary section who believe that production is only a capitalistic scheme to further drain the workers, oblivious of the fact that the greater the production the lower the prices of foodstuffs. Outside the party there is a section who would be prepared to see the scheme killed merely because it has been proposed by the Labour Party. And another section would try to impede it because it does not quite agree with the direction of the proposed railways. Some of these would be prepared to drag the trade away from its natural port, and place a burden in perpetuity on the intending settlers merely to secure trade for the district in which their interests happen to be. What is required in this great scheme is a broad, national view, which will not favour any particular port or locality, but will evolve a network of railways that will open up this vast tract to the best advantage. The greatest disability of the scheme is that the farms will not be available except under the wretched perpetual lease system. It is not to be expected that persons taking up Crown lands are going to take the same interest in their development when they know that at the end of fifteen years the rate of payment is to be revised. This is a pity, as in its conception the idea is bold and advanced, and one of the biggest opportunities of settling immigrants on a fertile tract that Australia has seen.

* * *

Last month we discussed this matter in a leading article and offered certain suggestions which appear to us the only means of combating the trouble that

The Strike Evil
on the
Land. are likely to have any satisfactory result. The main idea is to form a central controlling organisation to act as a defensive

power in the event of unwarranted attacks by labour engaged in rural industries, and to build up an adequate fund by some form of levy that will provide compensation to producers who suffer loss in standing out

against unjustifiable demands or strikes. Rural industries are such that they are peculiarly liable to serious loss if subjected to strikes of any duration, and the strongly organised labour concerned always times its attacks when the industries are most vulnerable. This is its strongest weapon, and it has achieved most of its success in the past simply because graziers and agriculturists have made no attempt at real co-operation or organisation to cope with it. One of our readers makes concrete proposals in this issue, and states that he will make one to further the object sought for. We want all primary producers to give a similar pledge, not for the purpose of aggression, but as a means of self-defence. If rural labour knew that farmers, graziers, &c., were firmly entrenched in strongly defended positions, it would think twice before making rash attacks. The matter should be fully discussed at the next annual conventions of the various producing bodies, and a special effort made to formulate some scheme on the lines we have suggested.

* * *

One often hears the remark that "strikes are not common to Australia, but they are present in every country." This may satisfy the ignorant, but it is not

How Canada deals
with Labour
Troubles.

true. In Canada they seldom have important strikes; they may have here and there small ones, but so far they have not been held up and practically ruined as Australia has been by labour unions. Why is this? Canada has no large centres of population. With the exception of Montreal, all her cities are of moderate dimensions, and with many large towns are spread over the length and breadth of the land. Then the Parliament is not under the control of city mechanics and city labour as it is with us. Again, their farmers have a better idea of co-operation, they can and do help their neighbours in their ploughing, harvesting and carting. The railways, being mostly privately owned, are not so liable to trouble as our Government-owned railways are, because discipline reigns in the former, and none or little in the latter. Again, our Arbitration Courts have fostered trouble; the unions know that however absurd their demands may be the courts will give them some or portion of them; therefore they make use of these courts as long as it suits them, but should they fail they refuse to obey the awards. Canadians have been far too sensible to follow in our track. The result is that Canada to-day is one of the most prosperous countries in the world, with a very moderate foreign debt per head, and few, if any, unemployed. It is about time we jettisoned much of our insane restrictive legislation, and followed on Canadian lines. The following brief remarks, which appeared recently in a Melbourne daily, by Dr. J. O. Miller, Principal of Ridley College, Canada, give a good idea of how that country has dealt with labour troubles. He says:—"We have had no serious disturbance since the great Winnipeg strike in June 1919, when a serious attempt, supported by the American I.W.W., was made to overthrow constitutional government in Canada. Shortly after this sinister plot was defeated the Government called a conference of representatives of capital and labour, together with a smaller number of educationalists and others representing the general public. The Minister for Labour prepared a programme for the week's discussion, and the results achieved were really wonderful. The bitterness which was so marked at the beginning of the proceedings had almost entirely disappeared towards the end, and when the gathering presented its report it was practically unanimous on all but two questions—the basic wage and the eight-hour day. The basic wage was accepted for women, but the eight-hour day was never introduced, largely owing to the fact that such a great proportion of labour in Canada is agricultural. It is noteworthy that since this conference there has not been a single strike of any importance."

Review of Pastoral Situation.

New South Wales.

SYDNEY, 10th February, 1921.

Light to heavy rains fell at the latter end of last month on the central and southern tablelands, extending to parts of the slopes and plains, and very hot weather was experienced in the far west, generally over 110 degrees, the highest being 117 degrees at Wentworth and Menindie, Euston and Balranald 115 degrees, and Deniliquin 113 degrees. Heavy falls of rain occurred on the north coast, up to eight inches in parts.

However, the season remains excellent all over the State, and feed is abundant everywhere. The wheat harvest is rapidly being gathered in, and from all parts of the State the reports are excellent as to the quantity. It is expected to yield over 55,000,000 bushels, which is about 11,000,000 below the record crop of 1915-16.

Rabbits.

The recent drought had one good point about it; it killed off a large proportion of the rabbits, and on the western plains they were almost wiped out. However, on the tablelands and hill country they get along merrily, and are now rapidly spreading out again, and it is up to the Pastures Protection Boards to put up a big fight. Some of the inspectors' reports prove how serious they are becoming again, as follows:—

Tamworth.—Rabbits are breeding at an alarming rate, but very few people seem to bother. This attitude of indifference must lead to disaster. It is an attitude that must be combated, otherwise the rabbit will gain the ascendancy again and levy its huge toll on the farmer and grazier.

Bathurst.—Rabbits are fairly plentiful, and the utmost exertion should be immediately put forward by the landholders to keep down the increase in the pest, especially by the way of fumigating and digging out.

Forbes.—Rabbits are still very scarce over a large area, but if neglected would, in a season like the present, soon breed up to the pest stage.

Glen Innes.—Rabbits are increasing in various parts of the district.

Armidale.—The rabbit pest is increasing to an alarming extent, and every known means of destruction should be systematically employed to combat the enormous numbers now in evidence.

Mosgiel.—Rabbits are increasing slowly, but are not as yet much in evidence.

Scone.—Rabbits have increased to an alarming extent in parts of the district. A number of prosecutions have been instituted.

Cooma.—Rabbits have been breeding fast, and in places are again numerous. Now that shearing is completed on many holdings the owners are again turning their attention to the work of rabbit destruction.

Albury.—Although the pest is fairly well in hand, the present abnormal growth of pastures impedes owners and inspectors in the work of dealing with rabbits.

Yass.—Rabbits are generally scarce, but are breeding freely, and at some places have increased. Owing to the abundance of grass it is impossible to work the poison cart, and the busy time of the harvest has delayed general work with the pest.

Mudgee.—Rabbits are breeding up very quickly, and show a great increase.

Narrabri.—Rabbits are increasing. Now that the dense herbage is cleared, action is to be taken towards destruction.

Milparinka.—The pest is increasing, and, although a rabbit is rarely seen, there is plenty of available evidence of their presence.

Jerilderie.—There are more rabbits about than there were a month ago.

Blowfly.

The sheep fly has been phenomenally bad in the north-west, and several stations have lost large numbers of ewes since the lambing, mostly from this pest. They have never been so bad, so several owners have told us when they called at

our Sydney office. Flies are bad, however, everywhere this year.

The Far West.

The Minister for Lands is paying a visit out west, and it is to be hoped some good will come of it. If he does what the recent Minister did not do, viz., something, his trip may be worth while. The watering places along the stock routes have been scandalously neglected, and those responsible for their upkeep should be sacked, tanks want cleaning out, drains put in order, and the machinery made efficient. One head man should be responsible for their upkeep, and he should be dependable, and personally visit every watering place periodically. Members of the P.P. Boards should bring under his notice every fault they find. This should be seen to at once, before the next drought starts.

Wild dogs are even more important just now. They are rapidly increasing, travel about like bands of wolves, and have done millions of pounds of damage. Years ago distemper was common among them, and their numbers were kept within bounds; now, however, this disease is rare, therefore the check has been removed. It would be wise, possibly, to spread the germs again. Their litters are very large; on one run lately three litters gave 25 pups. The late Government agreed to find the necessary money and start a dog-proof fence at once, but like other promises they made, it came to nothing. Now, however, the Country Party can show its value by forcing these matters along. Directly the Minister returns it is hoped he will move things and make his officials jump. They want a charge of dynamite to make them to do so.

Decentralisation.

Fifty years ago the Premier stated that he expected to have a railway from New England to the Clarence River opened in two and a-half years. It looks as if the position will not be altered fifty years hence. The magnificent ports of Coff's Harbour, Jervis Bay, and Eden should all have their independent railway system running out back, instead of dragging produce hundreds of miles to the one congested port of Sydney. However, the people are working it up both in the north and the south, and are demanding better and more business-like treatment. A party of politicians has been up north with the Minister for Works, Solicitor-General, and Minister for Justice.

In a welcome at Tenterfield the mayor said that in inviting the legislators to go over the country to be served by the proposed railway, they realised that first-hand information was of the utmost importance in deciding a big question of national development. They had tried for close on half a century to persuade successive Governments that those northern parts were entitled to tap their natural seaport to give facilities for the interchange of products, to promote settlement and to cheapen railway freights to the seaboard. They were forced to the conclusion that Sydney was regarded as rightfully the beginning and ending of practically every railway built in the State. All the powers that existed would not impede the decentralisation movement until their objective should have been achieved.

The Minister for Works, responding, said that decentralisation was one of the chief planks of the Labour Party, and then brought out the old State hash about "money being scarce, and they must wait until it is cheaper." At the same time they have increased their salaries, are paying £3000 a week in Sydney to support unemployed through a shipping strike, and talk about a harbour bridge, underground railways, &c., all work that should be done by private companies.

The leader of the Progressive Party, Mr. Wearne, affirmed that the Progressive Party had been brought into existence owing to the need of decentralisation. It would continue to be a burning question with the party. Irrespective of the question of paying, railways should be built in the interests of the whole State. The Progressive Party would stand solidly for railway connection between the tablelands and the coast.

What the Government should do is to give a concession for private capital to build the line, also one from the Monaro district or from Albury to Eden.

Pinkeye.

Pinkeye has made its appearance in some of the sheep flocks. This is a troublesome disease that seems to develop only in good seasons. Prompt treatment with sulphate of zinc is a sure cure, care being taken to see that the whole of the flock is treated, whether infected or not, and that the more serious cases are isolated.

Stock Returns.

Persons owning or in occupation of land and stock who have up to the present failed to make returns, called for by section 19 of the Pastures Protection Acts 1912 and 1918, are reminded that unless such return is forwarded forthwith, legal proceedings will be taken against them without delay, as the time for making the return has expired.

The stock inspectors for the districts are now making an inspection of the various holdings where stock are kept, with a view to taking immediate action against all defaulters.

Wild Dogs.

A large gathering of representatives of landholders of the Ivanhoe district assembled at Mosgiel lately to consider a means of dealing with the wild dog pest. There are now a large number of dogs south of the Darling River.

It was decided to assist in the formation of an association at Wilcannia to represent the western division, and approach the Government for assistance in the erection of a dog-proof fence.

Live Stock Market.

Since last month's report there have been eight sale days at Homebush, during which the following changed hands:—228,953 sheep and 20,696 head of cattle. The closing quotations were:—Sheep.—Prime Merino wethers to 30s., extra prime to 32s., good to 25s.; prime ewes to 25s., extra prime to 27s.; crossbred wethers, prime to 27s., extra prime to 30s., good to 24s. Cattle.—Prime heavy bullocks to £21, extra prime to £23, medium to £19; prime cows, £16, good to £13.

Sheepskins are quoted as follows:—Merino, full wools, best, 7½d. to 8½d. per lb.; ordinary, 5½d. to 7d.; medium wools, 4½d. to 7½d.; short wools, 3d. to 6d.; pelts, 1d. to 1½d.; crossbreds (medium to fine quality), full wools, 3d. to 6d.; short wools, 1d. to 3½d.; pelts, 1d. to 1½d.; Lincolns and coarse crossbreds, 1d. to 2d.

Hides.—Quotations:—New South Wales butchers' hides, extra stout picked hides to 22d. per lb.; heavy weights (over 52 lbs.), best, 8½d. to 10½d.; ordinary, 6½d. to 8d.; medium weights (46 to 50 lbs.), best, 6½d. to 7½d.; ordinary, 5½d. to 6d.; light medium weights (40 to 44 lbs.), best, 5½d. to 6d.; ordinary, 4½d. to 5d.; light weights (30 to 38 lbs.), best, 5½d. to 6d., ordinary 4d. to 4½d.; cut hides, 2½d. to 6d.; faulty hides, 2d. to 4½d.; dry hides, to 6½d.; bulls, to 3½d.; calfskins, to 6s. 6d. each; yearlings, to 16s.; horsehides, to 11s. 9d.

Victoria.

MELBOURNE, 10th February, 1921.

Unusual weather conditions prevailed during January, Mr. Hunt, the Commonwealth Meteorologist, going as far back as 1908 for a comparison. The average rainfall was much in excess of the mean, the percentage departure in the Mallee being plus 248, Wimmera 158, Western District 30, but in Gippsland the fall was below the average. The bulk of the rain, however, fell early in the month, and dry conditions have prevailed since, accompanied by a considerable amount of heat. Pastures are drying off, and rain is now needed in the southern half of the State, both for grass and fodder crops. Milk returns are falling off. It is reported that swarms of locusts are on the north of the Murray and around Mildura, and working southward, are eating out everything green in their track. In spite of abundance of dry grass, bush fires have not up to the present been very prevalent. Some destructive fires have, however, been reported in various parts.

The wheat harvest is about completed by now; it was feared that the heavy rains at the beginning of January would have caused damage to the standing crops, but apparently little harm was done. Reports from the wheat belt indicate that the yield will be well over estimates, in spite

of "take-all," which has caused losses in many places. The Railway Department claim to be shifting the grain expeditiously to the sea board.

Noxious Weeds.

The Vermin and Noxious Weeds Bill was discussed at the last meeting of the council of the Chamber of Agriculture. It was reported that the executive considered that the bill was the best attempt yet made to grapple with the problem of the spread of noxious weeds, but the executive was not satisfied that the Government was taking a full share of the responsibility in regard to unused Crown lands. The council finally decided to refer the discussion of the measure to the forthcoming farmers' convention at Sale, and a sub-committee was appointed to consider the bill and suggest possible amendments, which will be brought under the notice of the State Government later.

Reports from the north-east state that both St. John's wort and stinkwort are spreading. Alarm was caused in the Maffra shire council at the report that the former weed had made its appearance in the locality.

Improvement of Dairy Herds.

The council of the Victorian Chamber of Agriculture have under consideration a report containing several important recommendations in regard to the improvement of dairy herds in the State. The report is the outcome of a conference between representatives from the Chamber, the Co-operative Butter and Cheese Factories' Association, and the Department of Agriculture. It is recommended that the Government should be requested to establish herd-testing associations under Government supervision; that legislation should be introduced making it compulsory for all breeders of pure dairy stock for sale to farmers to have their cows tested; that when practicable pure-bred community bulls of approved dairying strain be attached to each herd-testing association; that no person be allowed to sell any bull as a pure-stock breeding bull unless the latter is registered in a herd book for dairy cattle, and is from a dam that is under possession of a certificate under the standard herd test. It was also recommended that all dairy cows except heifers with their first calf be branded as unsuitable for dairy purposes unless they produce 150 lbs. or over of butter fat during the lactation period; and that a penalty be enforced against the destruction of any female calves from cows that have given 250 lbs. of butter fat or over, and that in cases where the breeder is not in a position to rear such calves, the Government should take them over at a valuation. In view of the importance of the report it was decided at the last meeting of the council of the Chamber to receive it only with a view to its further consideration.

Tapping the Mallee.

The Railways Standing Committee have been taking evidence on various proposed extensions of the railway system to further open up the Mallee. One is to construct a line from Red Cliffs to the border, and connect with the South Australian system, which already extends as far as Renmark. Such a connection would open up the South Australian markets for the Murray settlements produce.

Sale of Sheep Dips, &c.

In explaining the provisions of the Amending Poisons Act passed last year, the Chief Secretary states that hitherto licenses to sell poisons could be granted only to storekeepers distant four miles from a registered pharmaceutical chemist. Certain poisonous substances, such as spirits of salts, phenyle, cloudy ammonia, sheep dips, vermin poisons, and weed eradicators could, however, be sold by anyone without a license. The new Act required all sellers of these substances to hold a license, and it would be necessary for grocers, storekeepers, ironmongers, and others to obtain one. The licenses would be issued only in places where there was no person licensed as a general dealer in poisons.

This seems to create rather an awkward position, as it indicates that the sale or distribution of sheep dip, &c., can no longer be carried out by agents in country towns, in most of which there would be a chemist licensed to sell poisons. The same difficulty would presumably apply in Melbourne, but

doubtless manufacturers and distributors there will be exempted.

Live Stock Market.

During the month four sales of sheep, lambs and cattle have been held at Newmarket, with a total offering of 128,970 sheep, 76,150 lambs, 10,050 cattle, as against 138,760 sheep, 126,100 lambs, 11,300 cattle for the previous month.

The following are the prices at the sales held on the 2nd inst.:—Prime crossbred wethers, 30s. to 34s.; prime crossbred ewes, 23s. to 26s.; best Merino wethers, 27s. to 29s.; Merino ewes, 14s. to 19s.; prime pens of bullocks, £21 to £24 2s. 6d.; best pens of cows, £14 to £16 17s. 6d.

Notes.

A young man named Murdock M'Kenzie Smith was sentenced at Dimboola to three months' imprisonment for the careless use of fire, a burning cigarette butt which he threw away having started a fire, by which 25 acres of stubble, ten tons of hay, and ten chains of fencing were destroyed.

The South Australian Government are offering a bonus of £10,000 for a new, effective and economical method of thoroughly clearing Mallee land, including the removal of stumps, and the sum of £500 for a method for the destruction of scrub without the removal of the roots. This should be of interest to the Mallee farmers in this State.

The Mount Bute flock of pure Merino sheep (owing to the estate having been taken over for soldier settlement) has been dispersed. This was one of the famous Western District flocks, and its dispersal is to be greatly regretted. The whole flock, about 24,000 in all, averaged 35s. 2d. per head.

Queensland.

BRISBANE, 7th February, 1921.

SOUTHERN.

The month has been a good one; it has been seasonal. That is to say, in nearly every part of the State there was evidence that the wet season had set in. Several wet weather periods were experienced, accompanied in some cases by very heavy falls. Practically all parts of the State benefited, and in some of the western districts creeks and rivers were swollen and traffic interrupted. In some of the districts, however, the rain was partial. The Maranoa did not benefit as much as some parts of the south-west, and though Yeulba got 245 points in the month, St. George got none. Cunnamulla and Charleville fared very well, but Eulo better. Taroom again had 5½ inches.

On the Darling Downs good rains were reported, and as the wheat crop had been gathered the fall was welcome. In the Burnett and other southern districts where maize is grown the rain revived the crop and saved the situation, as the weather had been dry in the early part of the month. The falls were very heavy in the coastal belt, especially in the last days of the month, some of the districts having 16 and 17 inches.

Land Settlement.

During 1920 the area of land selected was 2,000,000 acres less than in 1919, and half a million less than in 1918. The number of selectors also showed a reduction. The area taken up was 5,742,283 acres by 2157 selectors.

Shearers' Cooks on Strike.

An amusing interlude is reported from some of the south-western shearing sheds, where the cooks have refused to supply certain afternoon teas for the shearers and have gone on strike as their demands have not been granted. At some places the shearers did their own cooking. The cooks claim that while the shearers work 44 hours only, the cooks are required to do about 90 hours.

A recent union report stated that there are 2000 shearers, 400 pressers, 3500 shed hands, and 600 cooks employed in Queensland. The money earned by them amounted to £640,000. The recent increases under the award represented £226,250 and a reduction of 563,000 hours, the equivalent of 781 additional hands.

Stud Stallion for Queensland.

Mr. Ernest Baynes, chairman of the Council of the Royal National Agricultural and H. Association, who has been

in Melbourne, has secured a promise that the Defence Dept. will make available a remount stallion for Queensland. It is hoped that it will be Jolly Maltster. Mr. Baynes has always fought for improving the type of remount horse in the State.

Agents' Selling Charges.

It has been announced that the selling charges by agents at the Enoggera saleyards have been reduced from 5 per cent. to 3½ per cent.

Frenzied Finance.

The revenue for seven months of the financial year shows a deficit of £850,212 after all the talk of careful financing and economy. The money received was greater by £913,790 than in the corresponding period of last year, but the expenditure increased by £954,827.

Dairy Produce.

The production of dairy produce is increasing rapidly. It is estimated that the export of cheese in nine months ended March will be 45,000 crates, or 20 per cent. higher than the previous season's shipment. It is believed that in the same period the output of butter for export will have reached 360,000 boxes, which is easily a seasonal record.

Poisoned by Sudan Grass.

A sensation was caused in the Toowoomba district the other day by the poisoning of eleven cows, the property of Mr. G. Crowther. They had been turned into a paddock where there was a second crop of Sudan grass. This grass is allied to the sorghum family, which absorbs prussic acid. It is suggested by one authority that pure Sudan grass does not absorb prussic acid, but when grown near ordinary sorghum becomes hybridised. Others suggest that if cows are fed substantially on other fodders before being turned into Sudan grass, they will not suffer ill effects. It is stated that cattle should not be put on the grass in wet weather.

Live Stock Markets.

Four sales were held at Enoggera during January, a total of 24,600 sheep, 1750 lambs, 2860 cattle, and 228 calves being offered. The following are the latest quotations:—Three-quarter to full woolled Merino wethers, 18s. to 24s. 9d.; half-woolled Merino wethers, 14s. 6d. to 18s. 9d.; quarter woolled Merino wethers, 14s. to 23s. 6d.; full-woolled crossbred wethers, 23s. 6d. to 25s. 3d.; half-woolled crossbred wethers, 22s. 6d. to 23s. 6d.; short-woolled crossbred wethers, 15s. 6d. to 26s.; prime lambs, 18s. 6d. to 22s.; good lambs, 15s. to 17s. 6d.; prime extra heavy bullocks, £25 to £30; prime heavy bullocks, £16 10s. to £17 10s.; light bullocks, £13 10s. to £14 10s.; prime heavy cows, to £15 12s. 6d.; prime cows, £10 10s. to £12; light cows, £7 to £8; calves, vealers and weaners, 5s. to 65s. (At the sales on the 9th inst there was a considerable reduction in beef prices. The market for prime beef opened at 40s. per 100 lbs., but the demand eased, and prime cow beef sold down to 30s. to 33s. Prime mutton also declined.—Ed.)

Cheese Industry.

The contract with the Imperial Government having run out—the factories were receiving a little over 1s. per lb.—some anxiety is felt concerning the disposal of future supplies, which are accumulating more rapidly than the overseas freight provided. Queensland supplies most of the cheese exported.

Notes.

The National Agricultural and Horticultural Association has sought the sanction of the City Council to a scheme for the improvement of the show grounds by the closure of portion of Gregory-terrace, the acquisition of portion of Alexandria Park, and other things, but the council refused to agree to the proposals. The association is now entitled to add "Royal" to its title.

A two days' horse sale was held in Brisbane at the end of January, when the market showed a great revival, especially for power horses, and those suitable as remounts. A number of horses from the State stations were also sold. Prices ranged up to £30 for the best, but scrubbers were hard to sell.

The Forestry Department claims that the formation of heavy plantations above prickly pear patches has already been proved practicable, and the department will experiment with drought-hardy umbrageous trees which, if successful, will also provide timber for a district not well served in that respect.

The price of hams has been reduced by 4d. per lb. in pursuance of an undertaking given to the Prices Commissioner.

The auctioneers, land and estate agents are considering the question of raising their fees on sales of property reaching £1000.

CENTRAL.

In the rain on the coastal belt, extending right through the Central district, St. Lawrence had over 18 inches and Mackay and Proserpine 16 inches. This rain will do an enormous amount of good to the sugar industry. The central districts also had good falls, Clermont, Emerald and Dingo registered over 8 inches. Down towards Blackall the falls were lighter, and Longreach also did not do so well. The rain extended right to the border of the Territory, Camooweal having over 5 inches. Urandangie, on the other hand, had only 104 points for the month.

Slump in Sheep.

A steady drop in sheep values has been recorded in the Central district of late months in sympathy with the drop in wool. It is said that aged full-fleeced ewes in lamb have been sold as low as 7s. 6d. each. This is the lowest quotation for some years. Wethers, which were worth 25s., are down to nearly one-half that sum. A case is recorded where sheep were bought for 35s. and allowed to remain on the vendor's property. The owner of the sheep is now willing to re-sell at £1.

Cotton Growing.

Mr. Crawford Vaughan, formerly of South Australia, has been inspecting country in Central Queensland in connection with the expansion of the cotton industry. He is said to have backing by persons interested in cotton, who are prepared to launch out in Australia.

Taxation Anomalies.

The Central Graziers' Association is taking steps to get the Taxation Commission to sit in Rockhampton. One speaker said that he knew of 150 graziers who were suffering from taxation anomalies.

NORTHERN.

The rainfall was very satisfactory throughout the north. The falls in the Peninsula were far above the average for the month, and reached 25 inches in places. These were wet season rains. In the Carpentaria also some good registrations were noted. Normanton had nearly 10 inches, Burketown over 5 inches, and Georgetown nearly 5 inches, while out towards Cloncurry the falls ran to between 3 and 4 inches. Hughenden had over 3 inches, but down towards Winton there was little or no rain. Generally, however, the falls should leave the stock routes in good condition.

New Steamship Service.

An announcement has been made that the British India Company intends to resume the Torres Straits service. This may lead to great development in North Queensland by permitting direct shipment of refrigerated cargo to London. Cold stores have been erected at Cairns, and with the encouragement the dairying industry should make great headway on the tableland and in the hinterland. The meat industry is capable of great expansion in that region.

The Sugar Crop.

Good rains have fallen throughout the sugar districts. The last to benefit were the cane areas in the Bundaberg district, where the cane was backward, but these have now been relieved by good falls. The reports from all centres show that increased areas have been planted and that there is bound to be a big increase in the yield if the seasonal conditions continue satisfactory. A conference is to be held shortly to deal with the question of the price of sugar, which in turn will regulate the price to be paid for retail sugar.

Towards the end of the cutting season some of the harvesters at the Babinda mill made extortionate demands for cutting cane, and the mill was hung up and some of the cane had to stand over until next season, entailing great loss to the growers. In consequence, there is some talk in the Cairns district of asking the Government to establish a system of insuring cane against such occurrences. Inquiries already made from the State Insurance Department elicited the reply that the risk was too great. The matter has been brought under the notice of the Government, but so far it has not taken the bait.

Stock Stealing.

The Burke Graziers' Association scheme for the prevention of cattle stealing has been altered. For the purpose of

securing more effective management the camp superintendent has been placed under the control of an executive officer, who is to be paid £1000 a year. The camp is engaged in mustering cattle and patrolling. The association has already done a great deal of good, and has initiated a number of prosecutions.

State Stations.

The control of the State stations has been reorganised. The office of pastoral inspector of State stations is to be discontinued. The various northern stations will, in future, be grouped, the manager of Lyndhurst (Mr. Ferguson) controlling, in addition, Dotswood, Wandovale, and Brooklyn stations, and the manager of Vanrook (Mr. Corbett) will supervise the Vanrook properties and Merluna station. The general manager himself will attend to the southern and western stations—namely, Dillalah, Keeroongooloo, Diamantina, and Buckingham. It is understood that the present pastoral inspector (Mr. Gallagher) will be found another position in the department.

Gregory North Rabbit Board.

At the last meeting of the above board, held at Boulia in December, the chairman stated he regretted that there was no report from the superintendent. However, that gentleman had wired from Windorah in following terms:—"Have made an exhaustive inspection entire length of southern boundary, also proposed deviation. Rabbits now almost extinct along fence." The next meeting of the board will be held at Boulia on 29th March.

Notes.

A proposal for drying maize to permit of its export from the Atherton district, where it grows well, has been temporarily abandoned on account of the cost. The necessary concrete buildings and plant will cost £150,000.

The State meat shops at Townsville have been closed for some time owing to trouble with the men. The terms laid down for resuming included the cutting out of the privilege of free meat. This privilege is not enjoyed at other State shops. The men rejected the offer.

South Australia.

ADELAIDE, 9th February, 1921.

Notwithstanding heat waves with high temperatures, weather conditions for the past month must be described as seasonable. The mid-summer months are expected to provide hot weather, and the first two months of the year seldom fail to give the soil a good baking and provide the daily press with the opportunity of writing about the "excessive heat" and advising "old subscribers" what to eat and wear in order to pull through. Next to a good rain at the proper periods, nothing is so fertilising and beneficial to soil, herbage and animal life as the summer sunshine, and stockowners and producers generally are not complaining at heat waves and high temperatures. The country continues in good heart everywhere as the result of the good season throughout the latter half of last year, and there is an abundant supply of feed and water.

Harvesting operations, which were so frequently interrupted at first, were completed in good weather, and it is open to question whether the damage done by rain and wind in December and New Year's Day was as great as at one time estimated. It is expected that the wheat yield will exceed 30,000,000 bushels, in which case the quantity gathered will be the second largest on record. The quality of the grain is good, and with the exception of bleached samples from districts where heavy rains fell during harvesting time, will exceed fair average quality standard. After collecting samples from all parts of the State the Chamber of Commerce fixed the standard bushel for the year at 60½ lbs., compared with 61 lbs. last year.

General Elections.

The State is about to be plunged into a political whirlpool. Parliament having run its full period of three years, writs are being issued for a general election to be held on 9th April for 46 members of the House of Assembly and 10 members for the Legislative Council. The campaign

ill not be officially opened by the Liberal Premier (Mr. Earle) until 8th March, but candidates are already on the war path, and the outposts have already begun to skirmish. There are two main parties in State politics—Liberal and Labour (Socialists)—but there threatens to be one or more cross currents in the shape of "Independents," while efforts are being made to make up a party out of "Nationalists" (Labourites who broke from their party on conscription) and breakaways from the Farmers and Settlers. The electoral system being based on the block vote, it is a rare thing for a candidate outside the two big parties to win, but he often succeeds in giving the seat to the minority vote by splitting the majority.

The Liberal Government will go to the country with an excellent record of careful financing and surpluses, and much useful legislation carried through last Parliament, but electors are proverbially fickle as well as apathetic, and on a three-cornered contest, together with the sweetened baits of socialism, Labour may gain enough seats to have a majority. In that event South Australia may be expected to "make history" similar to that of Queensland and New South Wales.

Land Settlement.

Good progress is being made at various points along the Murray preparing high lands and reclaiming swamps, and settlement is steadily expanding in river districts. Cabinet ministers have been on an official visit to the south-eastern parts of the State, where extensive drainage schemes are being carried out, while attention is also being paid to opening up new mallee lands. Preference is being given to returned soldiers, and the Minister of Repatriation reports that an increasing number of men will shortly be provided for on new and repurchased lands. One of the great drawbacks to the growth of the agricultural industry is the difficulty in obtaining skilled labour at any price, while the different workman demands high wages and cannot be depended upon to remain at his job at times when most required. During the height of the harvest, when unfavourable weather threatened, farmers were compelled to pay exorbitant rates in order to save the crops, and such experiences are not calculated to encourage cultivation behind the point of the family's ability to cope with seeding and harvesting requirements. Labour difficulties are also checking the expansion of the pastoral industry.

The Wheat Pool.

But for the action of other States it is doubtful if South Australia would have continued the compulsory wheat pool another year. Farmers are tired of being "conscripted" and compelled to hand over the products of their capital and labour to a board which has far-reaching powers and practically uncontrolled. Strong exception is being taken to a decree that certain quality wheat such as "bleached" light grain is to be paid for at reduced prices according to the judgment of the receiving agent. The growers thus analysed hold that since a "pool" has been formed, the "pool," and not the individual farmer, should carry the whole load. There is a steady flow of grain over the railways to the various shipping ports, and a big effort is being made to ship a large quantity during the first three months of the year. Attempts to engineer strikes at shipping ports have been made, but a little firmness has disappointed the agitators and work was soon resumed.

The Government Produce Department.

The official report of the general manager of the Government Produce Department (Mr. G. A. W. Page), to which reference has previously been made, has been printed in detail. The report is up to 30th June last, and discloses a profit for the twelve months of £60,713, after paying £738 interest on capital. The accumulated profits amounting on 30th June, 1920, to £182,789 have been allocated as follows:—To repay all expenditure from revenue on capital account, £66,937; to repay part of loan expended on capital account, £53,201; paid to general revenue of the State, £1,176; and held in reserve, £21,473. The total capital has been reduced from £276,187 to £156,048. The total value of produce shipped through the Department to overseas market from 1895-6 to 1919-20 amounts to £4,532,883. Last year represented the record for any one season,

£626,388, the previous highest having been £408,499 in 1910-11. Shipments last year included 13,248,087 lbs. of mutton, 3,111,551 lbs. lamb, and 526,915 lbs. beef.

General.

Complaints continue to reach Adelaide from the West Darling country (N.S.W.) of the difficulty of dealing with wild dogs, owing to the failure of the present Government in Sydney to provide the check fence promised by their predecessors in office. Unless something is done to deal effectively with the dogs, the whole of this country will be devoted to cattle instead of sheep.

The Government is offering a bonus of £10,000 for a "new, effective and economical method of thoroughly clearing mallee land, including the removal of stumps," and £500 for a "method for the destruction of scrub without removing the roots."

The Director of Agriculture in his annual report to his Minister, again refers to the "continued decrease in the area sown for wheat." Since 1916-17 there has been a steady decline, from 2,778,357 acres to 1,921,515 last year. The Director also calls attention to the oft-repeated story of the "decline in the flocks of the State since 1891." The old adage, "you cannot have your cake and eat it" applies, since it is impossible to "cut up" for "closer settlement" large estates devoted to the breeding of sheep, and maintain without the standard of quality or the number of sheep. Attention is called to increases in cattle and horses.

Live Stock Markets.

Last week's markets provided 1489 cattle and 10,612 sheep. Supplies of cattle exceeded requirements, and prices were easier. Sheep were in strong demand, and prices firmed. The following quotations are reported:—Cattle: Prime bullocks £17 to £21; good £14 10s. to £17; prime cows £11 10s. to £14 10s., good £9 to £10 10s. Sheep: Prime Merino wethers, £1 14s. 6d. to £1 18s., good £1 10s. to £1 14s.; prime Merino ewes £1 11s. to £1 14s. 6d., good £1 6s. to £1 11s.; prime crossbred wethers £1 14s. to £1 16s. 6d., good £1 11s. 6d. to £1 14d.; prime crossbred ewes £1 11s. to £1 13s., good £1 4s. 6d. to £1 10s.; prime lambs £1 10s. to £1 13s. 6d., good £1 6s. 6d. to £1 9s.

Western Australia.

PERTH, 2nd February, 1921.

The prevailing element associated with last month was heat. Indeed it was 25 years since Perth experienced such a temperature in January as that of Friday, the 28th, when the mercury reached 109.4. We have to go back to January 1896 to get such heat in the first month of the year. In that month 112 degrees were recorded. Thursday, the 27th, reached 103, while Saturday, the 29th, touched 100.6. In the north-west great heat was experienced—Roebourne baked at 112, Hamelin Pool at 113, and on Sunday last Winning Pool (near Onslow) sizzled at 118. Verily it was a hot spell!

As a result natural fodders have been dried up considerably, and stock must feel the effects, unless owners can supplement the grass with a ration of hay or other feed. Many farmers do reserve a proportion of their crops or straw for the bare period, and they will be all right as long as they have water.

Rain, however, has been absent in all the south-eastern districts, or whatever local showers have happened along have been almost imperceptible. In the north-west there have been thunderstorms here and there, but no big downpour, and the pastoralists are beginning to be a little anxious. A good fall is needed, especially from the Gascoyne to the De Grey River, and stockowners will not feel comfortable till it arrives.

The Railway Strike.

After a fortnight's disorganisation of the country's transport, the railway strike terminated on Friday, the 14th ult. A number of conferences were held between the Government and the strikers' representatives. Throughout these the Government insisted on a recognition of the principle of arbitration, and the result was that work was resumed on the understanding that all points in dispute are to be referred to the Arbitration Court for settlement in its absolute discretion. The ques-

tion of whether any individual point is within the jurisdiction of the court will not be raised. The effects of the strike were minimised by the formation of a motor transport system by prominent citizens under the direction of Mr. A. J. Monger, president of the Primary Producers' Association, who was thanked by the Premier in his statement at the strike's conclusion.

Shearing Rates and Conditions.

On Thursday, the 13th, a conference was held between representatives of the Pastoralists' Association and the A.W.U. to discuss shearing rates and conditions for this year's shearing. The following are particulars of the rates claimed, to which keep is to be added in each case:—Shearers: 40s. per 100 for flock sheep, 80s. for ram stags and double fleece, 60s. for stud ewes, with compensation at 30s. per day.

Shed Hands.—£5 10s. per week.

Cooks.—£7 per week up to ten men, £9 per week for over ten men. Offsider at £7 to be provided for over sixteen men.

Pressers.—£7 per week, or 3s. per bale; dump size 3s. 6d.; 3d. per bale extra for weighing and branding; 4d. per bale extra for stacking.

Naturally these ridiculous rates were promptly rejected by the association, and subsequently an amended demand was made. This was 33s. 4d. per 100 for flock sheep, with proportionate increases for other classes of sheep; compensation 20s. per day; shed hands, £4 10s. per week; cooks, £5 10s. per week up to ten men, £8 per week over ten men up to twenty-five; £9 per week for over twenty-five men, and offsider at £5 10s. Pressers, £6 per week, or 2s. 9d. per bale; dump size 3s. 3d.; 3d. per bale extra for weighing and branding; 4d. per bale extra for stacking.

As well as the above, claim was made for the conveyance of teams between sheds and from port or railway station to first shed and return from last shed to port or railway.

The Pastoralists' Association replied pointing out that rather than an increase, the price of wool justified a decrease on last year's rates.

The association has recommended to its members that no advance be made by them on the rates paid during the season just ended. These were:—Flock sheep 30s. per 100, ram stags 60s., stud ewes 40s., double fleece 60s. in flock, 40s. at beginning or end or both; compensation, 17s. 6d. per day; shed hands, 70s.; cooks, £5 per week up to ten men; £7 per week for over ten men; offsider at £4 to be provided for over 18 men; pressers, £5 per week or 2s. 6d. per bale; dump size, 3s.; 3d. per bale extra for weighing and branding.

Fat Stock.

Sheep.—Towards the end of the month the bulk of the offering comprised ewes ranging from prime heavy weights to low conditioned sorts. At the last weekly sale of the month opening prices were slightly firmer than last week's rates, especially for good quality wethers, but the market eased as sales progressed, showing a drop of fully 2s. per head towards the close. Quotations:—Best crossbred wethers, 24s. to 26s.; odd pens higher; good, 19s. to 22s.; medium, 14s. to 17s.; best crossbred ewes, 20s. to 22s.; odd pens higher; good, 16s. to 18s.; medium, 13s. to 15s.; best Merino wethers, 24s. to 26s.; odd pens higher; good, 18s. to 20s.; medium, 13s. to 16s.; best Merino ewes, 15s. to 17s. 6d., few higher; good, 13s. to 14s. 6d.; medium, 10s. to 12s. 6d.; aged and inferior sorts lower.

Lambs.—For good quality sorts the market was, if anything, a shade firmer than last week, but low conditioned stuff could only be sold at very low prices. Quotations:—Best lambs, 17s. to 20s., a few higher; good, 13s. to 16s.; medium, 9s. to 11s.; inferior lower.

Pigs.—Bidding was brisk throughout, all classes selling at prices in advance of late rates. The yarding contained a good number of pens of all classes of pigs, baconers and heavy porkers being in heavy supply. Quality was very pleasing, and was much in advance of recent consignments. Choppers were eagerly competed for, while baconers and porkers sold well; stores also attracting good competition.

Cattle.—Principally small sorts from agricultural areas. There was very little competition, and prices were easier. Quotations:—Fair quality medium weight steers, £11 to £12 10s., odd beasts higher; small steers, fair condition, £9 to £10 10s.; heifers, light weights, £7 to £8 5s.

New Zealand.

(FROM OUR OWN CORRESPONDENT.)

CHRISTCHURCH, 1st February, 1921.

AUCKLAND.

Since the heavy rain at the time of the Davis Cup tennis contests, there has been a spell of dry weather, which was, however, broken by a good fall a fortnight ago. The country is looking remarkably well, and there is a good supply of feed. The dairy farmers have had a prosperous season, and fat stock are now coming forward freely. From the Waikato district heavy drafts of fat stock are expected to come forward, as their offering has been delayed through the freezing works not opening at the usual time owing to the wages dispute.

Live Stock Prices.

Good supplies of beef are coming forward, and there is a keen demand at improved rates. Fat sheep and lambs are also selling well, but as in all other parts of the Dominion, the value of pigs has fallen. Prime fat bullocks have been making £18 10s. to £24 10s. per head, medium £15 10s. to £18 5s., equal to 50s. to 56s. per 100 lbs., cows and heifers £6 to £13, equal to 38s. to 45s. for cows, and 43s. to 49s. for heifers per 100 lbs., prime crossbred wethers 32s. to 36s. 6d., medium 29s. to 31s. 6d., prime crossbred ewes 28s. to 31s., medium 24s. 6d. to 27s. 6d., prime lambs 27s. 6d. to 33s., medium 24s. to 27s.

TARANAKI.

After a spell of very dry weather a good rain has fallen, and relieved the anxiety of dairy farmers. The province, owing to its favourable climate and soils for grass, has long been recognised as one of the finest dairying districts in New Zealand. In proportion to other agricultural and pastoral industries, dairying has developed there more than in any other part of the Dominion. The Taranaki dairy farmer has, in recent years, made great progress in the growing of extra crops for his herds, and has also found the benefit of top-dressing for his pastures. Besides this, there are still in the north and west Taranaki districts considerable areas which will make good dairying land.

From Cheese to Butter.

It is reported that the larger Taranaki cheese factories have turned over to butter. Many of the smaller cheese factories were fortunate in selling their cheese early in the season at from 1s. 1½d. to 1s. 2¾d. per lb., and should be able to pay out for the season equal to 2s. 10d. to 3s. per lb. for butter fat. These factories, through having the monthly advances guaranteed by letter of credit, are able to advance at least 2s. per lb. On the other hand, the factories that consigned their cheese are able to advance only from 1s. 6d. to 1s. 9d. per lb. butter fat, on account of the market having sagged. With the probability of cheese not bringing more than 1s. to 1s. 0½d. per lb., the banks are making correspondingly low advances on shipments.

HAWKES BAY.

The summer on the whole has been very dry, and at times very hot, in Hawkes Bay, but the weather was broken by a heavy storm that did some damage, especially to the fruit crop in exposed situations. Fat stock are going forward to the freezing works as quickly as they can be taken in, but store stock are very dull of sale. Shorn rape lambs are making 16s., 2-tooth wethers 19s., and three-year-old steers £7 to £8. In Poverty Bay, medium young wethers in the wool make 20s. to 25s. 6d., but other sorts are neglected.

Wool Held from the Commander.

It will be remembered that a prominent woolgrower in the Poverty Bay district refused to sell his wool to the Imperial Government under the commander. The Government admitted that he had power to do this, but not to ship it on his own account during the period of the commander. Whether it would be illegal to do so afterwards was not gone into at the time. As, however, the holders of such wool have fallen in, it is not likely that the Government will now attempt to add insult to injury by attempting a prosecution. It is reported that no less than 2000 bales of wool, which

were not included in the commandeering, are stored on the east coast of the North Island. The difference in value between the commandeering and present prices would amount to a nice sized cheque.

Maori Shearers' Performance.

An exceptionally fine performance was recorded at Mangaohae recently by I. Robin's team of Maori shearers. The 21,000 sheep on the station were shorn by nine men in 84 hours, the highest daily aggregate being 2550, or about 283 per man. The highest individual daily tally was 326, this being the number recorded by a native named Broughton.

Log and Grass Fires.

Owing to the dry weather log and grass fires started in northern Hawkes Bay on Christmas morning in the hill country at the back of Umutaoroa, and the strong wind which sprang up shortly afterwards carried the flames further afield, with disastrous effects. Several settlers had their properties swept by fire, which passed over the country beyond Umutaoroa down into the Piri Piri and Tataramoa blocks. Settlers there spent most of Christmas Day and night in fighting the flames and guarding their homes and sheds.

WELLINGTON.

The season has been a somewhat erratic one. A late spring resulted in a splendid growth of grass when the warmer weather set in. During this last month there was a very dry and hot spell, which caused feed to dry off. Good rains have since fallen, and feed is likely to make a recovery. The season has been a good one for hay, and more farmers than ever before have taken advantage of the opportunity to lay in a good stock of fodder for the winter. Shorn rape lambs make 16s. in Wairarapa, woolies 18s., 2-tooth wethers 15s. to 19s., 4-tooths 26s., and 3-year-old steers to £11 10s. In the Wellington district there are so few sales of fat stock reported that it is difficult to give quotations.

Californian Thistle and Foxglove.

Californian, or as it should be called, Canadian thistle, is obtaining a strong hold in many parts of the Dominion, and in the Taihape district there is said to be scarcely a farm which is not affected by the thistle. A few years ago the presence of the thistle on so many farms would have led to a large number of prosecutions under the Noxious Weeds Act, but during the past five or six years Californian thistle has not been regarded as a pest, and there have been no prosecutions. In parts of the Dominion it is realised that the thistle has come to stay, and beyond cutting it, where a mower can be used, to prevent seeding, or ploughing isolated patches where a farm is otherwise free, no serious effort is now made to eradicate it.

On the other hand foxglove is beginning to cause anxiety by its spread in various parts of the North Island. On some hill country in the South Island, where a shepherd had a flower garden about 50 years ago, the foxglove is spreading for miles around, and the value of the land would not provide a sufficient fund to pay for the cost of eradication. In time it must seriously affect the amount of pasture.

Friesian Cattle.

While in the United States and Canada, Mr. W. D. Hunt, who has a very fine herd of Friesians, and who has just returned from England and the Continent, saw some of the best of the Friesians at Wisconsin, Minnesota, and Brockville. He thinks the best of the breed in America might beat the best of those in New Zealand, but not by much. "The conditions of the tests in America differed from those of New Zealand. There the test," Mr. Hunt explained, "is short dated, here it is held that it should last for three hundred and sixty-five days. In New Zealand the animal on test must calve again not more than three months after the finishing of the tests, and it must have had a calf not more than 15 months before the test begins. It is different in America. There such restrictions do not exist; and the cow may be milked four times a day." Importing from Friesland and England just now was impracticable, Mr. Hunt said in conclusion, on account of the prevalence of foot and mouth disease. This trouble was very common all over Europe at the present time.

The Cattle Tick.

The cattle owners of Poverty Bay, and even as far south as Wellington, are becoming seriously alarmed at the reports

of the spread of tick-infested cattle from Auckland southwards. The tick, which so far is practically harmless, as it is not at present the carrier of any disease, has been known in the north of Auckland district for many years, but of late through laxity has been allowed to make its way south, along with cattle brought from the north. At Te Puke recently a mob of 250 was found to be infested.

At a meeting of the executive of the Wellington Farmers' Union a communication was received from the Director of the live stock division of the Department of Agriculture advising that the whole of the district from Manukau on one coast to Aotea on the other, was more or less infested with cattle tick, while as far south as Opotiki isolated cases had been found. On the motion of Mr. Dalrymple, it was resolved: "That this executive views with alarm the steady spread of cattle tick, a case being reported as far south as Tirau." Information had reached the executive to the effect that spraying was useless in dealing with the pest, and it was urged that all cattle in the infested district should be dipped, and the other provisions of the Act strictly enforced.

CANTERBURY AND MARLBOROUGH.

There has been a variety of weather during the month, except that the temperature has never been low. In fact it was very high at times, and at the beginning of January there was a decided heat wave, the thermometer in many cases registering well over 90 in the shade, and 100 deg. was also reported. The heat was followed by rain, which was heaviest at the northern and southern ends of the province, and light in the central parts.

During the past ten days there have been more or less general light rains, and the rape and turnip crops have greatly benefited, and there is also a spring of grass in the pastures. This kind of weather is, however, bad for the harvest, which is now in progress.

The store stock markets have been very quiet, on account of the shortage of feed and some doubt as to the meat market this season. There are still a number of wet ewes carrying their fleeces, farmers no doubt finding this the cheapest method of storing their wool. Many of the grain crops are very light, and the yield of both wheat and oats will be below the average. The conditions in Marlborough have been very similar to those in Canterbury.

Grass Fires.

At Christmas a large grass fire destroyed a large area of grass as well as fences, on the plains between the Orari and Rangitata Rivers, in South Canterbury. A boy with a cracker was responsible for it. A still more serious fire occurred during the heat wave on 3rd January. It extended from Bankside to Southbridge, and it is estimated that it covered over 100 square miles. A number of homesteads suffered more or less damage, but the greatest loss was in feed.

Wheat Prices.

An important conference was held last week at Christchurch between representatives of the wheatgrowers of the Dominion and the Minister for Agriculture. The basis of the Government's contract for the purchase of the present season's crop is as follows:—7s. 3d. for Tuscan and similar varieties, 7s. 6d. Hunter's, 7s. 9d. Pearl, all f.o.b., with three-farthings increment per month for six months commencing 1st May. The foregoing basis is subject to the following adjustments:—In the event of New Zealand requiring to import, an adjustment will be made on the basis of the price at which milling wheat can be purchased in February 1921, and landed ex-wharf, having regard to quality and to the necessary adjustment between North Island and South Island parity. In the event of New Zealand growing sufficient for its requirements, the adjustment will be made on the basis of f.o.b. Australian value, provided Australia has any exportable surplus, but in any case purchase prices will not be less than the minimum prices stated above for the respective varieties, with monthly increment. The Minister said that he could not definitely fix prices until the coming month, as they would depend upon Australian values. The conference decided that after this year the Government control of wheat and the subsidy of flour millers should cease, and the Minister expressed his approval.

The Kea.

In Parliament last session sums of money were placed on the estimates for the destruction of keas. Reports from the back country runs indicate that for some considerable time past the kea has been on the increase, and that on some stations considerable numbers of sheep have been killed and others injured as the result either of his curiosity or his liking for the kidney fat of the sheep. A price of 5s. is now upon his head, and the money is being paid out by the two departments, viz., Lands and Agriculture, as both are interested. Hitherto the beaks of the killed birds have been collected by the county councils in the affected districts, and now stock inspectors, as well, will pay for beaks sent in to the Stock Department.

Live Stock Prices.

The shortage of feed through the dry weather has affected the store stock market, but the rains of the last ten days should cause a fresh growth of grass, so that stock for fattening can be held until the rape and turnips are ready. Fat sheep have fallen to export level of values, but fat lambs have remained firm. Practically no business has yet been done in beef for export, and prices are yet above freezing rates. In a month fat pigs have declined about 4d. per lb. Store wethers are worth about 22s. 6d. to 25s.; lambs for finishing on rape, 20s. to 25s.; prime fat lambs, 30s. to 35s.; medium, 26s. to 29s. 6d.; prime crossbred wethers, 30s. to 35s.; medium, 26s. 9d. to 29s. 6d.; prime crossbred ewes, 27s. 6d. to 31s. 6d.; medium, 23s. 6d. to 27s. Prime bullocks, £20 to £25; medium, £15 to £19 10s. Prime cows, £12 17s. 6d. to £15; medium, £10 to £12 10s.; prime heifers, £13 to £16 12s. 6d.; medium, £10 5s. to £12 10s. Bacon pigs, 6½d. to 7¼d. per lb.; porkers, 9d. per lb.

Shipment of Wool by Sailer.

At a meeting of the shareholders of the North Canterbury Freezing Company Limited, the chairman of directors, Mr. G. D. Greenwood, said that for some time past the directors had been considering the acquiring of vessels so that producers would get the benefit of direct shipping. Something had been done in this direction, and the directors had arranged that in a month's time or so a sailing ship would be available for the conveyance of the wool to London. This would obviate having to pay storage rates until the opening of the season in London, as the boat would take about four months to complete the voyage. Storage on the ship would be charged for at the rate of 1d. per pound, and the commission charged would not be more than 1½ per cent. It was expected that 75 per cent. of the wool value could be paid cash to growers as soon as the wool was shipped.

OTAGO AND SOUTHLAND.

The month has been generally a dry one in the southern provinces of the Dominion. The grain crops are fairly good, and the turnip crop is promising, but needs more rain. Business in stock is still very quiet, and prices have been receding, partly through the fear of a shortage of autumn feed and

(continued on p. 100.)

Rainfall Returns.

EXPLANATION.

In the first column will be found the average yearly (district) rainfall, in the second the total fall to date, in the third the mean fall for the month, the fourth is the average rainfall for the next month based on the return of rainfall ever since records were taken, and in the fifth the condition of the pastures—E, excellent; G, good; F, fair; I, indifferent; B, bad.

WESTERN AUSTRALIA.

No.	Division.	Average Yearly Rainfall.	Total from 1st Jan. to 31st Dec.	Total Fall for Jan.	Average Rain-fall, Feb.	Pastures.
		Inches.	Points.	Points.	Points.	
1	North Kimberley ..	27.04	1,798	193	609	F
2	East Kimberley ..	25.70	1,818	14	698	F
3	West Kimberley ..	23.26	2,480	72	590	F
4	De Grey ..	13.59	984	1	252	F
5	Fortescue ..	9.44	842	0	134	F
6	West Gascoyne ..	9.11	853	2	94	F
7	East Gascoyne ..	9.39	725	22	95	F
8	S.W. North Coastal ..	17.85	1,981	10	60	F
9	S.W. South Coastal ..	36.26	3,873	36	72	F
10	S.W. Central ..	17.66	1,720	35	71	F
11	Eucaly ..	14.35	1,661	31	66	F
12	South-eastern ..	9.95	836	30	101	F
13	North-eastern ..	10.23	907	3	187	F

SOUTH AUSTRALIA AND NORTHERN TERRITORY.

No.	Division.	Average Yearly Rainfall.	Total from 1st Jan. to 31st Dec.	Total Fall for Jan.	Average Rain-fall, Feb.	Pastures.
		Inches.	Points.	Points.	Points.	
14	Northern Rivers ..	44.70	3,908	1,002	939	G
15	Northern Plateau ..	12.18	3,012	371	275	G
16	North-west ..	8.21	1,215	145	50	G
17	Far North ..	7.02	1,298	13	64	G
18	West of Spencer's Gulf ..	13.02	1,671	110	59	G
19	Upper North ..	13.03	2,147	203	57	G
20	North-east ..	8.30	1,405	87	56	G
21	Lower North ..	17.39	2,209	179	61	G
22	West-central ..	17.15	1,920	143	49	G
23	East-central ..	23.61	2,690	186	72	G
24	Murray Valley ..	13.01	1,537	151	65	G
25	Upper South-east ..	16.57	1,641	123	69	G
26	Lower South-east ..	25.49	2,675	111	78	G

QUEENSLAND.

27	Peninsula North ..	57.76	5,902	2,130	1,313	G
28	Peninsula South ..	39.67	3,138	1,512	904	G
29	Lower Carpentaria ..	28.20	3,253	517	682	G
30	Upper Carpentaria ..	26.02	3,358	396	550	G
31	Barron ..	63.85	6,786	1,835	1,127	E
32	Herbert ..	76.84	8,023	1,132	1,372	E
33	East-central Coast ..	46.96	3,983	781	782	E
34	West-central Coast ..	24.17	2,569	966	406	E
35	Central Highlands ..	25.16	2,559	584	372	G
36	Central Lowlands ..	19.59	2,401	228	337	G
37	Upper Western ..	15.20	2,310	177	327	G
38	Lower Western ..	11.98	2,373	145	211	G
39	Port Curtis ..	37.18	3,259	663	549	E
40	Moreton ..	49.49	5,026	619	695	E
41	East Darling Downs ..	28.30	2,959	154	317	E
42	West Darling Downs ..	23.84	2,392	181	274	E
43	Maranoa ..	23.67	2,514	110	318	G
44	Warrego ..	17.76	2,351	163	242	G
45	South Far-west ..	13.08	2,450	89	206	G

NEW SOUTH WALES.

46	Trans-Darling North ..	9.11	1,069	11	93	G
47	Trans-Darling South ..	9.90	1,258	40	82	G
48	Cis-Darling North ..	13.71	1,779	152	159	G
49	Cis-Darling South ..	12.44	1,561	40	91	G
50	Upper Bogan ..	17.55	2,030	158	136	G
51	Lower Macquarie ..	17.83	2,190	189	170	G
52	Western Gwydir ..	20.02	2,487	88	232	G
53	Eastern Gwydir ..	23.45	2,740	46	256	G
54	Nandewar ..	28.40	3,057	142	302	G
55	Liverpool Plains ..	26.95	3,164	90	243	G
56	West New England ..	31.27	3,376	145	296	G
57	East New England ..	36.72	3,348	456	531	G
58	Clarence ..	53.62	5,754	918	676	G
59	Orara ..	54.30	6,290	2,052	564	G
60	Manning ..	49.38	3,823	1,232	576	G
61	Hunter ..	35.01	3,451	396	336	G
62	Cudgelong ..	25.53	3,416	176	207	G
63	Central Plateau ..	34.67	3,770	433	312	G
64	Warrumbungles Highlands ..	27.26	3,694	213	281	G
65	Lowlands ..	21.92	2,573	173	156	G
66	Sydney ..	48.19	4,342	315	454	G
67	Nepean ..	31.75	3,463	495	321	G
68	Illawarra ..	39.92	3,671	368	332	G
69	South Coast ..	35.97	3,872	206	342	G
70	Upper Murrumbidgee ..	25.18	2,950	310	203	G
71	Snowy Mountains ..	40.70	3,827	198	228	G
72	Jugiong ..	30.26	3,231	165	157	G
73	Tumut ..	21.57	2,594	134	134	G
74	East Riverina ..	16.46	1,956	138	113	G
75	West Riverina ..	13.71	1,608	76	94	G

VICTORIA.

76	Mallee North ..	12.57	1,465	197	86	G
77	Mallee South ..	13.73	1,482	174	93	G
78	North Wimmera ..	16.26	1,690	162	90	G
79	South Wimmera ..	19.58	2,055	193	87	G
80	Lower North Country ..	16.93	1,854	151	93	G
81	Upper North Country ..	19.64	2,180	187	102	G
82	Lower North-east ..	28.48	3,089	212	143	G
83	Upper North-east ..	42.50	4,452	308	194	G
84	East Gippsland ..	30.29	3,232	172	217	G
85	West Gippsland ..	35.12	3,431	200	168	G
86	East-central ..	33.69	3,793	343	157	G
87	West-central ..	24.08	2,371	288	125	G
88	North central ..	26.11	2,849	265	134	G
89	Volcanic Plains ..	23.88	2,247	242	115	G
90	Western Coast ..	29.86	2,776	133	126	G

TASMANIA.

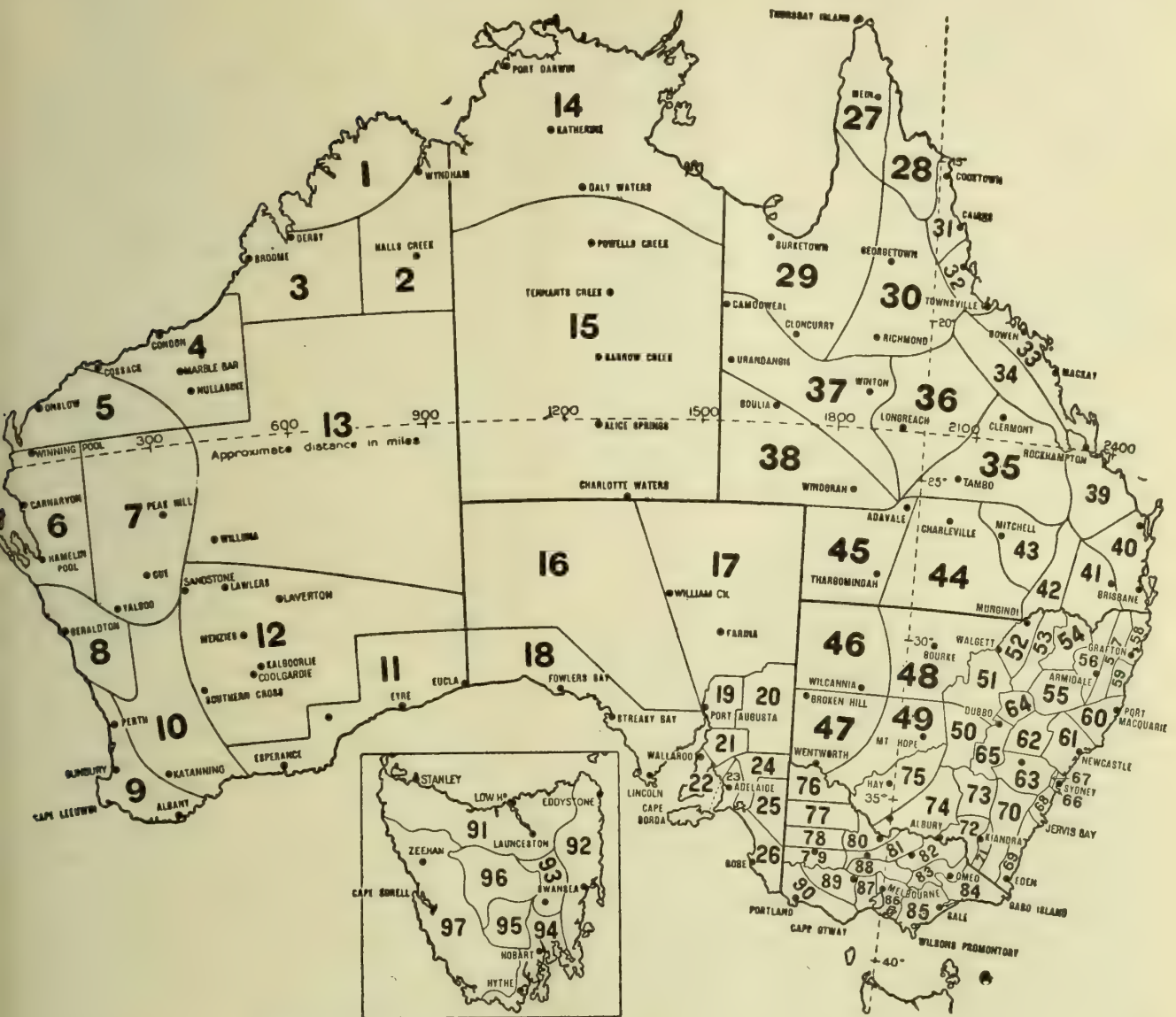
91	Northern ..	41.15	3,009	342	100	E
92	East Coast ..	32.26	3,080	221	172	E
93	Midland ..	21.63	2,032	251	129	G
94	South-eastern ..	27.98	2,246	217	151	G
95	Derwent ..	25.51	2,091	162	138	G
96	Central Plateau ..	31.17	2,596	232	166	G
97	West Coast ..	36.12	3,376	423	344	G
98	King Island ..	37.17	3,174	—	140	E
99	Flinders Island ..	27.69	2,814	—	102	E

N.B.—100 points = 1 inch.

H. A. HUNT, Commonwealth Meteorologist.

Australian Rainfall Map.

N.B.—100 points = 1 inch.



Seasonal.

The past month has been a genuine summer one over practically the whole continent, with plenty of hot, fine weather, and here and there occasional storms, giving light to heavy registrations. In New South Wales the season is still excellent, with abundance of feed, but now that harvesting has been almost completed with a very good yield, rain to freshen things up would not be amiss. Blowflies have been very bad, particularly in the north-west. In Victoria the position is also satisfactory, but rain would be welcome to revive the grass and fodder crops, which have gone through a considerable heat spell the last two or three weeks. The wheat harvest has turned out a very good one, and the heavy rains early in January apparently did little harm. Queensland has had some good rains during the month, especially in the coastal districts. In parts, however, the precipitation tapered off, notably around St. George and in the Maranoa, in the Blackall and Longreach districts, and around Winton. In

the Peninsula and Carpentaria and some of the central districts, as well as the Darling Downs and contiguous parts, very useful falls were recorded. Tasmania has perhaps never looked better at this time of the year, and everywhere pastures are good, with stock doing particularly well. South Australia continues in good heart everywhere as the result of the good season throughout the latter half of last year, and there is an abundant supply of feed and water. Western Australia has on the whole experienced a hot, dry month, and though there have been scattered storms occasionally, they have all been fairly light, and graziers, particularly in the north-west division, would like to see a good solid fall of rain. In New Zealand the northern provinces are in good order, with plenty of feed, but in Hawkes Bay, Wairarapa, Canterbury, and south therefrom the season has been somewhat erratic, and characterised by very hot weather and occasional storms. Feed has gone off in parts, but with a good rain there should be little fear of a shortage for the autumn,

partly through the unfavourable reports from Home concerning the meat market.

The Shearing Season.

Owing to the uncertainty as to what the position is likely to be for some time, Southland woolgrowers do not show the usual inclination to send their clip to store, the consequence being that much less wool has come to hand this season than has been the experience in the past. The season has been one of the best from a shearing point of view, and the operations were carried out most satisfactorily, no complaint having been heard as to shortage of labour, while the weather was all that could have been desired. The wool is generally in first-class condition, as the winter was a good one, and there was a continuous supply of feed. There are still a large number of sheep unshorn.

A Southerly Sheep Station.

Mr. James Patrick, of the Taieri, who is a successful exhibitor of draught horses, is the lessee of the Campbell Islands, which he runs as a sheep station. Mr. Patrick recently went down to the Campbells, and it is his intention as a side line to engage in the whaling and sea elephant industry for oil, for which purpose he has been getting together all the necessary gear and impedimenta.

Live Stock Prices.

The live stock markets are very quiet, as competition for fats is still confined to local butchers, and there is still little demand at present for stores. Prime fat bullocks are selling at £19 to £22; medium, £16 10s. to £18 10s.; prime cows and heifers, £12 to £14; medium, £10 to £11 10s.; prime crossbred wethers, 34s. to 40s.; medium, 30s. to 35s.; prime ewes, 29s. to 34s.; medium, 26s. to 28s.; prime lambs, 30s. to 33s.; medium, 25s. to 29s. 6d.

Tasmania.

LAUNCESTON, 5th February, 1921.

The country has perhaps never looked better at this time of year. There have been good summer rains, and everywhere there is a semi-greenness about the pastures, while in late districts like the north-east they are quite verdant. The grass grub has done a fair amount of damage, but on the whole feed is very abundant. Stock are doing particularly well. The flow of milk in the dairying districts is far above the average, and the butter output is a record.

The harvest is just about completed, except for the cutting of the barley crops. These are looking well, as all late crops were much benefited by the summer rains.

Threshing is now in full swing, and some great yields are being recorded in the north-west. Some oat crops have turned out from 90 to 100 bushels per acre, and wheat 40 to 50 bushels. Market prospects are dull, as supplies are heavy and the local demand very light, and the lengthy shipping strike is having a depressing effect. The one fortunate aspect is that it has come at a time when the export trade would not have been very heavy even under normal conditions.

Fixing Produce Prices.

A movement has been started in Tasmania with the object of fixing prices of produce, so as to leave a fair monetary return to the farmer above the cost of production. The Minister of Agriculture does not give any encouragement to the scheme. He has stated that he is against the fixing of the price of agricultural produce in any way, because experience proves that any attempt to do so always reacts on the farmer, and makes the position much worse. The prices were ruled by the seasons, and in a short time the whole scheme would break down. He recommends co-operation to farmers as a means of improving their position.

Crop Forecast.

The Government Statistician, in his annual estimate, states that the acreage under the principal crops this season is about the same as last year, and 2 per cent. under the average of the past ten years. The area under wheat has risen again

to 22,000 acres, and the average yield is put down at 19 bushels. Oats show a big decline to 37,000 acres, and the yield is estimated at 30 bushels per acre. The acreage under barley has decreased to 4000 acres, the approximate yield being 21 bushels. The area under hay is put down at 109,000 acres, and the yield at 1.8 tons per acre.

United Kingdom.

LONDON, 23rd December, 1920.

The last month of the old year has been a fickle one for the agriculturist, early snow and hard frost being rather an unusual feature at mid-month. However, it has found farming operations fairly well forward, very good progress having been made with autumn cultivation and sowing in all parts of the country. Field work generally is now well forward, and on the whole autumn corn was drilled into a good seed bed.

Early sown wheat, oats, and beans are good plants, and look well, and the later sown are coming up evenly in most districts, but a fairly large proportion is not yet showing. In the east and south-east, however, where the land has been very dry, germination has been slow, and the plant is frequently irregular, but would probably improve with rain, which was wanted at the end of the month. The potato yield per acre over the whole country is estimated at 5.45 tons per acre, or two-fifths of a ton under the ten year average, but the total crop, owing to the increased area, is estimated at 3,137,000 tons, or 400,000 tons more than last year. The mangold yield is estimated at 19 tons per acre, which is equal to the average of the last ten years. The total production, 7,292,000 tons, is 1,000,000 tons greater than in 1919. The yield of turnips and swedes is estimated at 14.25 tons per acre, or 1.45 tons above average, and the total production at 14,200,000 tons, or 3,000,000 tons more than last year.

Vitamines Explained.

The term *vitamines* is used so often nowadays in articles on feeding animals, says the "Agricultural Gazette," London, that it may be opportune to attempt a popular explanation of the word.

For long it was thought that the value of a food could be assessed merely on the basis of the percentage composition of such substances as "albuminoids" and "carbohydrates," names which roughly correspond to flesh-forming substances and fuel providers. Practical men, however, have never been satisfied completely with this classification, and new facts have been discovered which go to show that the value of foods may depend on the presence of substances other than the regulation albuminoids, carbohydrates, &c. Now what are these new discoveries? They consist in the finding in nearly all natural foods, i.e., in uncooked fruits, seeds, herbage, &c., of small quantities of accessory food substances—substances which are essential to the healthy growth of animals.

The best known example relates to human nutrition. It has long been known that the disease of scurvy can be prevented by the use of lime juice. It has been discovered that lime juice (and many other raw natural products) contain a certain substance—a *vitamine*—and that if this substance is absent from diet scurvy appears. Now these *vitamines* cannot be classified as albuminoid, carbohydrate, &c., and yet they are definite chemical substances produced by living plants, and there is some evidence to show that animals cannot manufacture them.

Enough has been said to show that the science of nutrition has taken a new aspect. We can no longer regard only the gross amount of albuminoids, carbohydrates, &c.; we have now to consider the possibility that certain foods may possess specific values which are independent of the amount present in a diet.

On the Wallaby.

Motor Trip to Central Australia.

(Continued.)

PART II.

The first night out from Oodnadatta we were the guests of Mr. and Mrs. Kempe, at Macumba, another of Mr. Kidman's Stations, on which when we passed through he had 1000 horses, besides a fair number of cattle. Macumba is a huge property, stretching right over east almost to where the waters of the Finke and Diamantina meet in flood times. It is worked in conjunction with the Hamilton Run, about 10 miles further north, and Eringa, on the southern edge of the Northern Territory boundary, another 40 miles on, and all are under the supervision of Mr. Kempe.

At Macumba there is a good artesian bore close to the homestead, and down by the creek in front of the house we saw the first Central Australian vegetable garden. This is irrigated by the bore water, and was an eye-opener, both as regards variety, and its wonderful growth, and succulent appearance. Right up the track, almost wherever there was a bore or well, we found the same wonderful vegetable gardens, a great boon to the settlers in such a climate. In no case beyond Oodnadatta did we see or hear of a Chinese gardener, the gardening all being done by the settlers in their spare time, or by black boys.

Across the Alberga River sand-bed, about a quarter of a mile wide, and which comes in on the north of the run from the west to join the Macumba and the Finke, we were hauled by two draught horses kindly sent along by Mr. Kempe. "Sandy," the elder of the two black boys in charge of the horses, Mr. Kempe lent us as a pilot to dodge the worst of the sand patches as far as the Hamilton homestead. At the 10-mile bore, where there is a fine long waterhole, with fish in it, we camped for lunch. This waterhole, like several others as far north as the Territory boundary, wherever there is an artesian bore or good natural mud or mound spring, is surrounded by bullrushes and reeds, and in every-where, without exception, there are reed larks or warblers. The presence of these birds at such isolated spots, sometimes perhaps 50 to 100 miles apart, is rather puzzling. The reed warblers are not migratory, but strictly local in habit, so their instinct in finding these isolated places seems extraordinary. The presence of fish in such waterholes, and also the few permanent holes of the Finke, and in the McDonnell Ranges, is no doubt accounted for by waterfowl in good seasons carrying the spawn thereto, but the reed warblers are a much harder nut to crack.

At the 10-mile bore an old "Hutter" leads a lonely life in charge. He also runs a small store, built of the usual galvanised iron, but with the unusual sign—in two-foot capitals—right across the front—of "DO DROP IN." At Hamilton homestead, where there is another good artesian bore, and the farthest truly artesian north that we saw, we dropped our pilot "Sandy," with regrets on both sides, as he was a joluble and very entertaining old fellow, of about sixty. He had been with the police as a tracker for some five years, and spoke English well. On his side he said: "Wished I had known before about this trip, for I like you chaps, and would have asked the boss to let me go all the way."

On nearing Blood's Creek store, on the Federal Run, held by Messrs. Bailes and Sons, we struck the best running on the trip, for 8 or 10 miles across an almost level plain, with very few gibbers (loose stones), and where we easily ran at the rate of 30 miles per hour.

Right from the 10-mile bore to within 50 miles of Blood's Creek, a distance of nearly 50 miles, and more especially where the track follows the Stevenson Creek, the nest-building caterpillar was very severe on the box trees. Combined with the long two and a-half years' dry spell, this caterpillar had apparently settled many

hundreds, if not thousands of trees, and trees of any kind in The Centre are most valuable, as generally they are few and far between till one gets fairly into the McDonnells. The mulga, which so dominates the country once past the gibber region, and north of Charlotte Waters, can hardly be called a tree, as in The Centre it is more truly a shrub.

Some of the caterpillar nests are very big, up to 12 in. by 6 in., and covered with a substance in appearance like fibrous hessian. These insects feed on the leaves of the box trees at night, and retire into their nests during the day. They seem to prefer the leaves of the box, and occasionally that of the bloodwood, but the two species of river gums on the Finke and Hugh and other watercourses were apparently very free of them. This caterpillar, if not the same, is allied very closely with the one that has done so much damage to the myall in New South Wales.

Through the same stretch of country we noticed mistletoe very bad in the mulga bushes, but not severe enough to knock them out. Just before reaching the Hamilton Homestead we passed clumps of red mulga, the trunks of which are of a purple lake shade. In The Centre, from all we could hear, this shrub is very local, and we only saw it across a stretch of 20 to 30 miles on the Hamilton going up, and on a similar parallel on Dalhousie returning. On the central Western downs of Queensland it is known as minaritchie, or lance wood, is very hard, heavy, and close grained, and valued (though small in diameter) for fencing posts.

Along the Stevenson Creek an incident happened which goes to prove the class and stamina—often boasted of—of the McDonnell Ranges horses. Suddenly a big black horse bounded up the bank of the creek, and out on to the track, some 200 yards ahead of us, with a man of over 16 stone in the saddle. As he went at full gallop our curiosity was aroused, and as the track was good, we put on a little better than a 2-minute gait, and kept it up for fully a mile, and yet could not gain a yard on him. When he pulled up at a small mob of horses that he was taking down to Adelaide from the McDonnells, and we saw the size of the rider, we were indeed surprised.

How many horses down south could be found to-day to beat 2 minutes for a mile with over 16 stone up, and off the grass? If there are many such horses in the McDonnells, no wonder they are boasted of. We found the rider's reason for haste was that he did not want his mob to see the car suddenly, and perhaps stampede. He had with the horses a Myall nigger, with a beard to his waist, the wildest looking we saw on all our trip, and from appearance far more likely to bolt at sight of the car than the horses.

From Blood's Creek to Charlotte Waters is the last stretch (about 35 miles) of the long gibber steppes, extending, with short breaks, from Marree, for about 400 miles. In this last stretch it is practically compulsory for wheeled traffic to leave the direct north and south camel track, along the telegraph line, and make a detour to the north-west, as along the direct route the gibbers (loose stones) often run up to the size of footballs, and in places even larger. After running up a Gidgee Creek for a couple of miles the detour track breaks off across a plain on the Eringa Run in about half-a-dozen places, and it wants luck to strike the right one. Largely owing to misdirection we struck a wrong one, and after following it some 9 miles felt we were heading too direct west, and had to get back to Blood's Creek, where we picked up Mr. Bailes, jun., who kindly came on with us to the Albinga Creek, half way to the Charlotte.

Just here the big Crown Point Run starts, which is roughly about 70 miles across by 100 long, and some 10 miles further on, on open gibber undulating downs, we crossed into the Northern Territory. There is nothing to show the boundary line, not even a mark of any kind on one of the poles on the telegraph line, but the border can be easily gauged from the position of Mt. Frank, an outstanding flat-topped hill of about 250 ft. elevation lying some 2 to 3 miles west of the track.

Charlotte Waters telegraph station is only 6 to 7 miles across the border, situated on a particularly bleak and windy gibber plain, without a scrap of shelter. The station is a big and very solid stone building, built like a fort, with

a court-yard in the centre, iron barred windows, and loop-holes through the thick walls. The other telegraph stations further north are built on the same plan, the idea being to withstand attacks or a siege from the natives in the early days of the overland telegraph. However, the sudden rush on Barrow Creek (the next station north of Alice Springs) in February 1874 was the only attack ever made on any of the stations, and in that case it happened outside the building, when the officials about dusk were cooling off in the open after a hot day.

Generally speaking, the gibber country north of Oodnadatta appeared to us to be a softer and better grazing country than the gibbers between there and Marree, showing more herbage and permanent water.

Once past the Charlotte Waters, and well on to the Crown Point Run, the country alters, being mostly of a sandy loam covered more or less with mulga, sparsely grassed, till the McDonnells are reached, but carrying a deal of Parakelia and Munyeroy, and a herbage that looked to us very much like a species of white candiduff. The two former are also flowerers, the Parakelia carrying a beautiful star-like flower of a dark purple lake shade, and the Munyeroy a yellow daisy, but both in their stalks and leaves are very succulent and full of moisture, and a good handful squeezed out will leave nearly a teaspoonful of water.

The settlers look upon all this herbage as very fattening. On good Parakelia country, after good rains, cattle can live without water for months at a stretch, and feed out at such times for many miles beyond touch with permanent waters. However, when this happens stockmen have to be very careful to get the cattle back to country permanently watered before the Parakelia dries up, otherwise heavy losses may result.

Twenty miles from Charlotte Waters, and a few miles east of the telegraph line, is the Crown Point Homestead, on the south bank of the Finke, presided over by Mr. Tom Pearce, the managing partner of the Crown Point Pastoral Company, in which Mr. Kidman has a big interest. Mr. Pearce, who is a very interesting personality, gave us a hearty reception. As a boy he was broken in in the country lying between Lake Eyre and the Western Australian border (a country that even to-day is known by fewer men than The Centre), and was on Crown Point as a lad. Then he spent 25 years in the Top Territory, mostly breaking in country and forming stations, and has gained fame as "Mine Host" in Mrs. Gunn's well-written novel "We of The Never Never." Mr. Pearce's experiences were both entertaining and very interesting.

As at Macumba the house staff at Crown Point are all half-castes or lubras, and the cleanliness and order of the kitchens, and good cooking, at both stations were evidence of how well these native girls can be trained.

This was our first sight of the Finke, in ancient days when the McDonnell Ranges were 8000 to 10,000 ft. high, one of the leading rivers of Australia, and even to-day the main source of drainage of The Centre. However, here it was a great disappointment, as though the channel is about a quarter of a mile wide, the banks are low, and we were expecting to see at once some of its famous cliffs, which, however, end some 30 miles further up, and run off and on pretty well to the head waters.

From Crown Point down the channel flattens out, and out on the east of Macumba in flood times runs out over immense flooded areas, eventually joining the Diamantina flood waters, and running in to the north end of Lake Eyre. The redeeming feature of the Finke at Crown Point is the splendid gum timber along its banks and channels, and after seeing practically no trees over 25 to 30 ft. in height since Leigh's Creek, 450 miles south, these fine trees, many 50 to 60 ft. high, and 2 to 3 ft. in diameter, were a source of pleasure. The main and most valuable timber is a gum so closely akin in appearance to red gum (*Eucalyptus Rosata*) that our party fell into the error common to everyone who goes to The Centre, and also to some of our scientific explorers, of taking the tree for *E. Rosata*. However, Mr. Pearce was just finishing some splendid new stock yards, and took us across to see the density and weight of the timber, and to

our surprise instead of being red, the timber was all yellow, and very similar when cut to yellow box.

The other eucalyptus trees along the Finke were a very white-trunked gum (*Eucalyptus Terminalis*), with more silvery leaves than the above mentioned, but nothing like as good a timber (this tree I will refer to later on in describing the McDonnell district, where its snow-white trunks are a feature of the landscape), bloodwood, and a big Coolabah box.

Mr. Pearce has a splendid well on the bank of the Finke channel, with a big windmill and a 20,000-gallon tank, and his vegetable garden irrigated therefrom is a sight, with young citrus and peach trees coming along splendidly. We saw a vegetable here new to us, which Mr. Pearce got from the Top Territory, Chinese cabbage, very luscious, and used both for salads and spinach.

(To be continued.)

Two Great Shows.—Manawatu and Canterbury, N.Z.

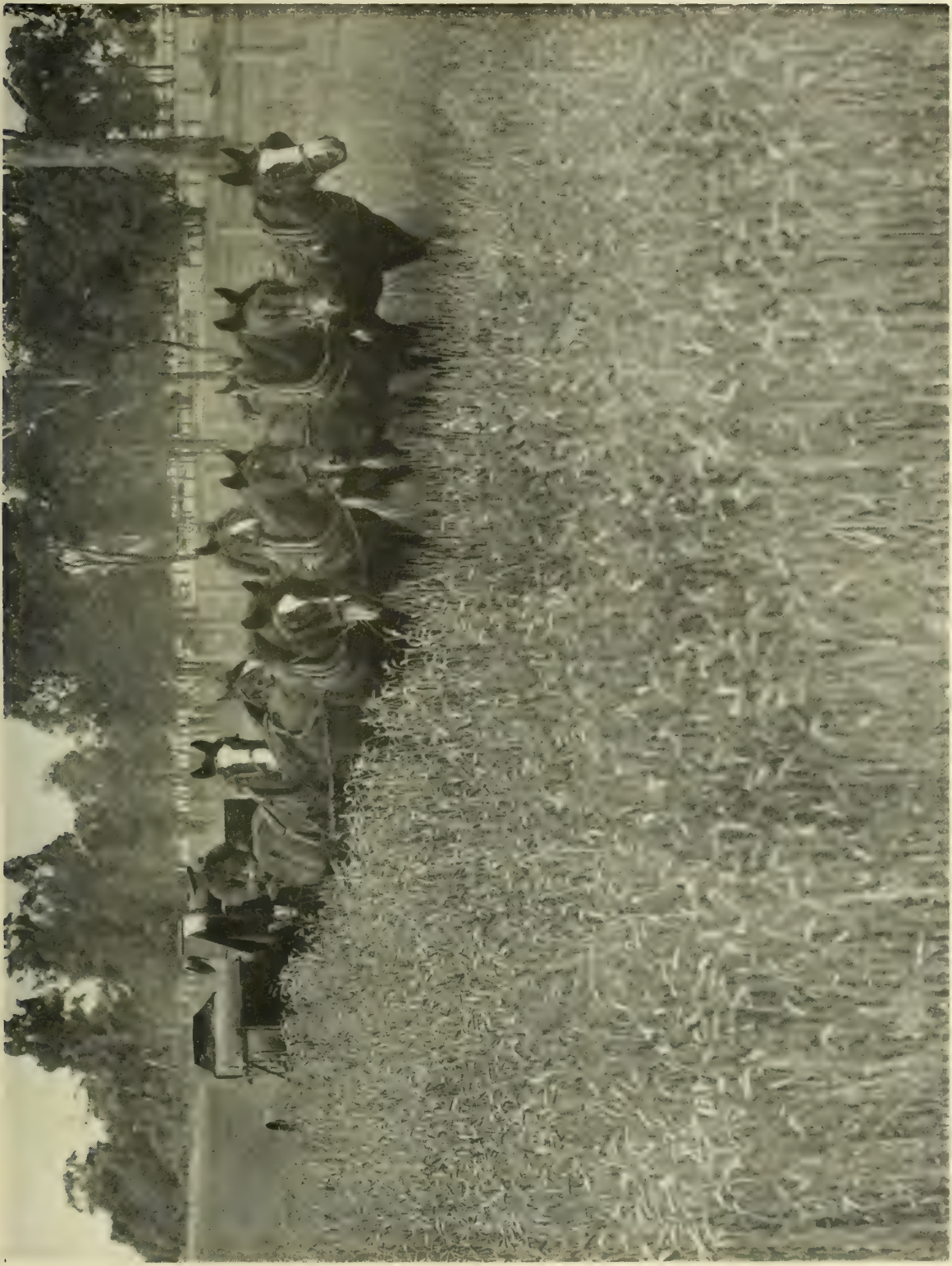
A Comparison.

It is often asked How does the Canterbury Show compare with that held at Palmerston North? In the way of show accommodation, cattle and sheep pavilions, Palmerston is an easy winner, and Christchurch will have to do something in that respect to meet the requirements of exhibitors. Stud stock are now too valuable to be dumped down on a show-ground without suitable provision being made to protect the animals from the adverse weather conditions that arise from time to time. Again, it must be very hard for the judges to do their work when the wool has received a thorough soaking.

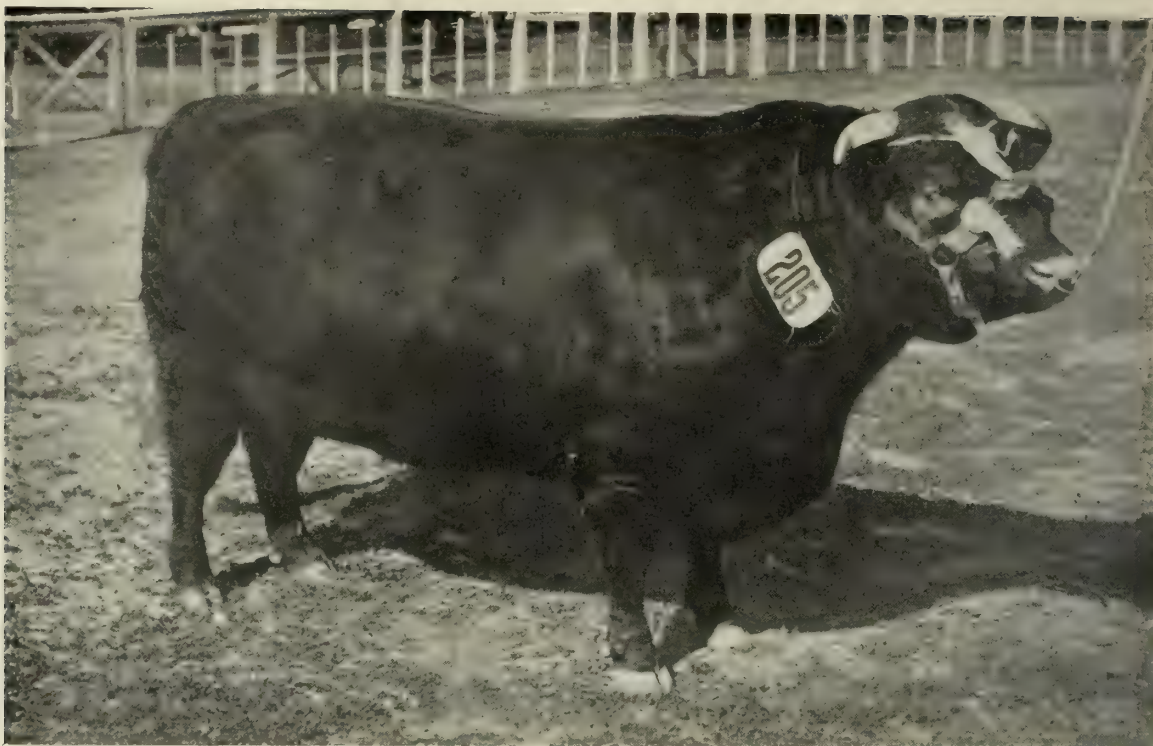
Christchurch certainly score a great victory in their beef Shorthorn display, with an entry of something like 140, compared with Palmerston's 40. Then again the latter come to light with a Jersey entry of 122, as against Canterbury's 31, and so one could go on. However, the following list approximately indicates the entry values of the more important classes for 1920, where the two shows are concerned:—

	Palm. Christ- North. church.		Palm. Christ- North. church.
Horses—		Sheep—	
Saddle horses ..	79 118	Lincolns ..	27 42
Draught stallions,		Romneys ..	124 85
&c. ..	15 93	Eng. Leicesters	7 69
Working draughts	60 40	Shropshires ..	24 48
Cattle—		Southdowns ..	60 81
Shorthorns ..	40 140	Corriedales ..	9 118
Herefords ..	28 —	Merinos ..	— 74
Aberdeen Angus	13 —	Bord. Leicesters	— 108
Ayrshires ..	78 26	Ryelandts ..	— 22
Jerseys ..	122 31	Eng. Leicesters	7 69
Friesians ..	116 72	Half-breds ..	— 17

The acquisition of the valuable and old established business of HILL, CLARK AND CO LIMITED, Sydney, by the AUSTRALIAN, MERCANTILE, LAND AND FINANCE COMPANY LIMITED is reported, the transfer to take place as from the 30th June, 1921. The transaction is one of considerable magnitude, and will increase the already wide scope of the operations of the Australian, Mercantile, Land and Finance Company Limited, which handled last year in Australia 144,897 bales, and Hill, Clark and Co. 46,347 bales wool. The directors of Hill, Clark and Co. Limited, Messrs. W. E. Richards, C. H. Doyle, and J. Delighton, will, as from the 1st July next, be directly associated with the Australian, Mercantile, Land and Finance Company Limited, and arrangements have been made for the transfer of the leading members of the former company's staff. In addition to the supervision of the purchasing company, the interests of the clients of the acquired business will have the special attention of those directors and officers whose management and efficiency in the past have built up Hill, Clark and Co. to its present high position in Sydney. In the past the Australian, Mercantile, Land and Finance Company's stock transactions were limited to store stock, but, by the acquisition of Hill, Clark and Co., a Fat Stock Department is added to its business in Sydney.



WHEAT HARVESTING IN THE BARMEDMAN DISTRICT, N.S.W.



GRAND CHAMPION SHORTHORN BULL, FAITHFUL.

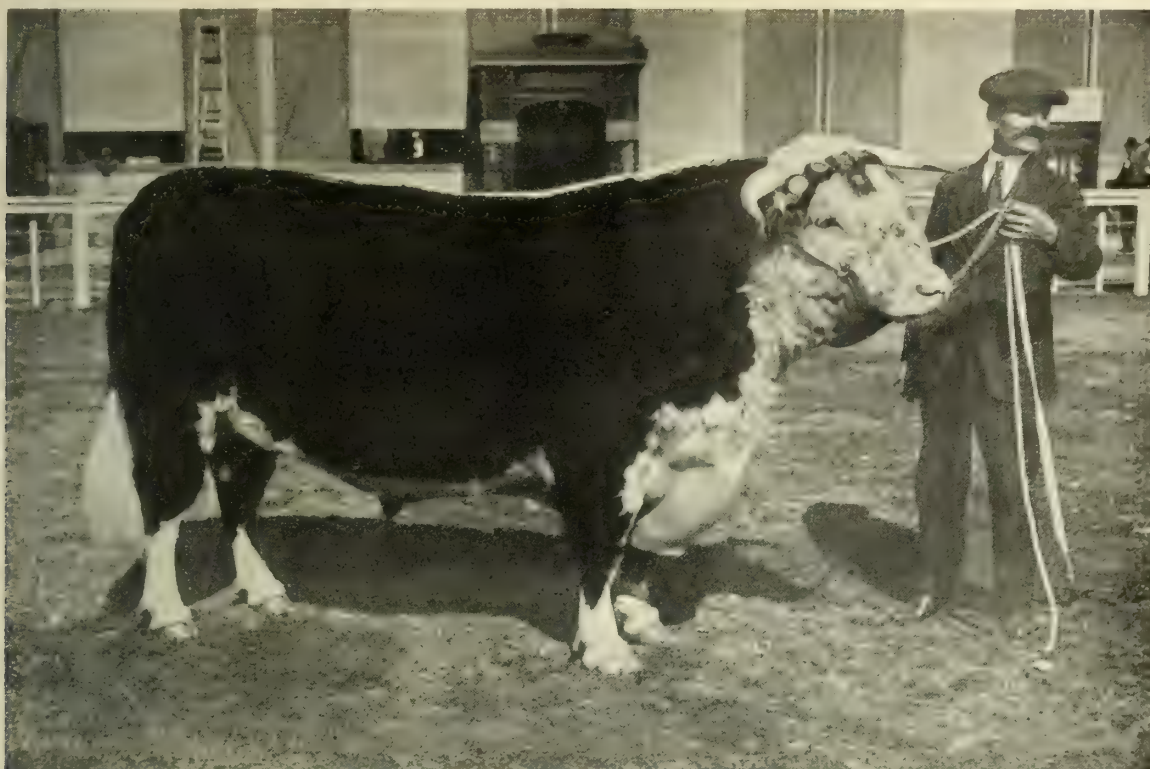
Bred by Dr. J. Malbran, and exhibited by Mr. Wm. Angus. Sold for £9600. Purchased in 1919 for £1540.



GRAND CHAMPION SHORTHORN COW, LADY HAMPTON KING 40.

Exhibited by Estancia Cecilio Lopez Limited.

CHAMPIONS AT THE PALERMO SHOW, ARGENTINA, 1920.



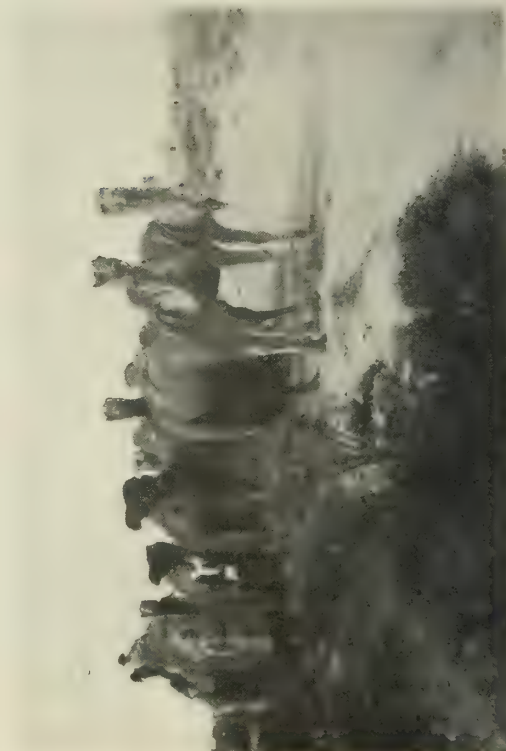
GRAND CHAMPION HEREFORD BULL, LAME KING.
Exhibited by Senores R. C. Quesada & Co., and sold for £7860.



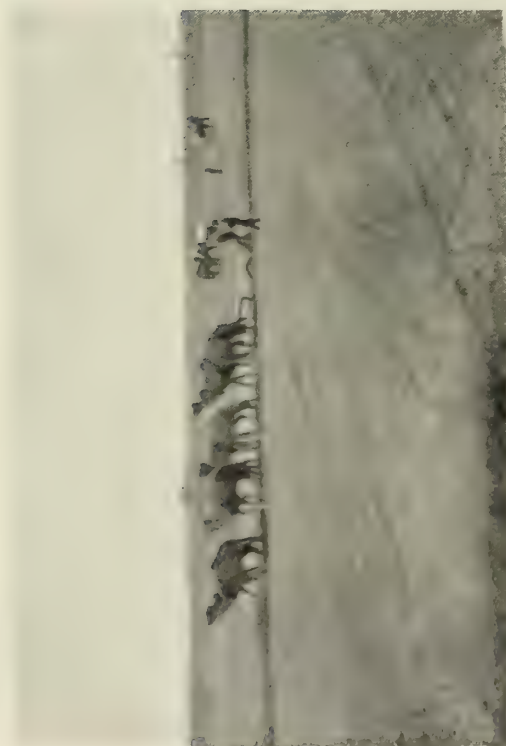
GRAND CHAMPION HEREFORD COW, ANOKA.
Bred by Senor Juan F. Arrechavala.
CHAMPIONS AT THE PALERMO SHOW, ARGENTINA, 1920.



THE DINNER HOUR.



A CAMEL TEAM WITH STORES ON MUNDRABILLA.

TANK SINKING ON MUNDRABILLA STATION.
Camels ploughing and Horses scooping.

MUNDRABILLA HOMESTEAD.

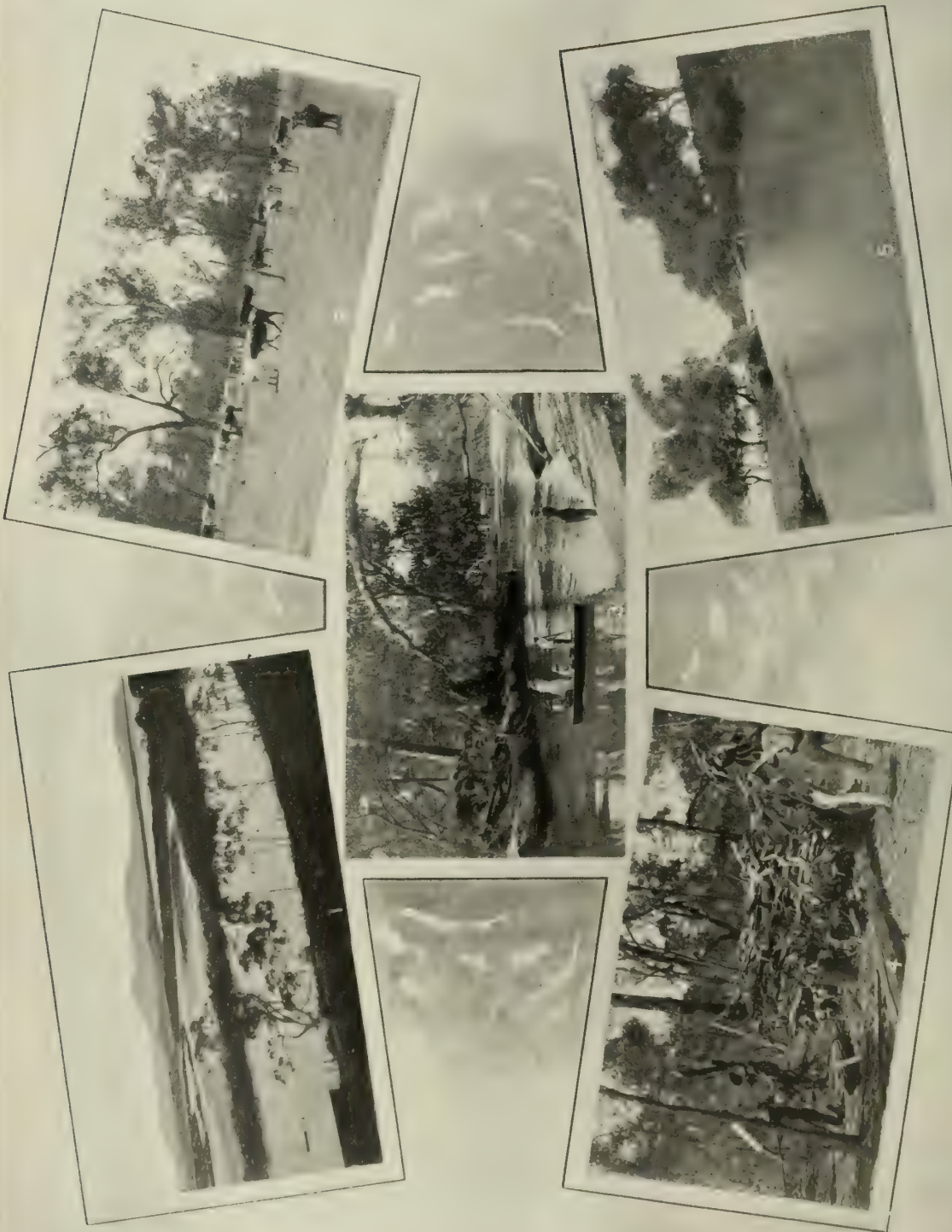
Built fifty years ago by Kennedy Bros. and McGill.

MUNDRABILLA STATION, VIA FORREST, W.A., THE PROPERTY OF MR. P. WATSON.

Mundrabilla is situated just over the border in Western Australia, some 60 miles from Eucla.



ZEBU CATTLE IN CUBA.



1. AUCELAND INLET AND MT. LARCOM, GLADSTONE, Q.

4. HEAPING PEAR ON STACKS OF WOOD FOR BURNING.
Part of Balcomba is infested with this curse but it
is being exterminated.

3. MACKENZIE RIVER, BALCOMBA.

The property has a frontage of
40 miles to this stream.

2. MOB OF FAT COWS ON BALCOMBA STATION, MARLBOROUGH, Q.

5. STRATHFINELLA, LONGREACH.
The property of Messrs. Willcocks and Newell.

SOME QUEENSLAND SNAPSHOTS.



BULLOCK TEAMS EN ROUTE TO TIBOOBURRA.
In the last, big drought, only camels were possible as beasts of burden.



PECULIAR FORMATION OF ROCKS SURROUNDING TIBOOBURRA,
in the Far North-west of New South Wales.



THE OVERLANDERS.



A STUDY IN EXPRESSIONS.

Wampy, the champion sheepdog illustrated on our cover last month, and owned by Mr J. L. Moore, Westbury, Tas.



GLEN HOLFORD HOMESTEAD, NEAR STAWELL, VICTORIA.
The Home of the late Mr. Holford H. Wettenhall.

Obituary.



THE LATE MR. ARTHUR COTTON.

(Whose death is reported in our Personal Notes.)

T. C. Ellis.

Thomas Chute Ellis, of Benara, Mt. Gambier, S.A., to whose death we referred last month, was the second son of the late Capt. Ellis, one of the early members of the old South Australian Provincial Council. He was born near Adelaide on the old Port Gawler and Hummocks Station, the property of his father, in 1848. He was educated at St. Peter's College, Adelaide, and the Charterhouse School, England.



THE LATE MR. T. C. ELLIS.

In 1869 the late Mr. Ellis purchased Benara Station, and over his 51 years' residence there bred up a high-class flock of Corriedale sheep. He made frequent trips to New

Zealand, and was interested with his brother, the late Chaloner C. Ellis, in Five Rivers Station, and on his own account in Mt. Nicholas, Lake Wakatipu, and several other hill runs. He was one of the foundation members of the Mt. Gambier Hunt Club (the most flourishing hunt in Australia outside the metropolitan clubs), and was for many years its president. He leaves a widow, three sons and one daughter (T. C. and W. N. C. Ellis, of Burrabogie and Eremeran Stations, N.S.W., H. C. Ellis, and Miss E. C. Ellis). Dr. J. C. Ellis, his third son, was killed at the war.

Oswald J. Quinn.

The death of Mr. Oswald J. Quinn, manager of Wave Hill Station, Northern Territory, which took place on the 3rd December, removes a highly respected and very popular man from pastoral circles. The son of the late Mr. James Quinn, of Yarraldool Station, N.S.W., he was born on that property in 1880. He took up pastoral pursuits at an early age, and his first responsible appointment was when he was appointed overseer at Auburn Station in the Burnett district, Queensland, and later on became manager of that station, a position he held for about twelve years.



THE LATE MR. O. J. QUINN.

In 1915 he was appointed to the management of Ord River Station, in the Northern Territory, by the owners, Messrs. Vestey Brothers. In 1916 he enlisted with the A.I.F. Field Artillery Brigade, and spent three years in the firing line, where he was twice wounded and also severely gassed.

Upon his return to Australia he again entered Messrs. Vestey Brothers' service, and was appointed to the management of Flora Valley Station, and later on managed Wave Hill Station until his death, which resulted from malarial fever and complications arising from the effects of gas.

Mr. Quinn was made a Justice of the Peace for the Northern Territory.

The following new subscribers to "The Pastoral Review" from countries other than Australasia have been received during the month:—Messrs. Wenz and Co., Leipzig, Germany; Estancia Marianita, Buenos Aires; "Farm and Ranch Review," Calgary, Canada; Ohio State University Library, Columbus, U.S.A.; F. Füll, Nedderton, England; Hugh Mackenzie, Dundonnell, Scotland; Pyramid Land and Stock Company, California.

Notes of Interest.

NOT TAKING ANY.

A sheepowner informs us that he has 700 crossbred lambs requiring to be shorn. He offered two shearers the job, giving them the wool as payment, but they refused. They take no risks. In these times of increased demands for wages this incident is of interest.

U.S.A. AND AUSTRALIAN MERINOS.

The "American Sheep Breeder" says:—"Some of our enterprising fine wool men in the West are not a little 'disgusted' over their failure to persuade the Department of Agriculture 'that there is absolutely no danger in bringing a few stud Wanganella Merinos from Australia.' The record of the Wanganellas and the fabulous prices paid for them by South Africa is whetting the appetite of several breeders, who are just crazy to try them out in this country."

We have frequently pointed out the fact that there is absolutely no risk to U.S.A. in the importation of Australian Merinos—Wanganella or any other type, and it is only the influence of a certain obstructive clique that prevents American breeders from enjoying the advantages and benefits they certainly would experience if the present senseless embargo were removed.

SUBSIDISING STRIKERS.

It has just leaked out that since December the New South Wales Government has been secretly distributing £3000 a week of the public money to assist the wharfies, who have lost their work through the stewards' strike. On the one hand the State Government threatens that unless the public supports the hospitals better, something drastic will have to be done; "it cannot find the money that is needed for the cure of the sick." On the other hand it can find £3000 a week to finance a body of men who have it in their power to force the stewards back to work, and bring the other maritime unions to a more sensible frame of mind. It was a choice of placing funds at the disposal of the hospitals to relieve suffering (without vote bribery) or handing over £3000 a week to law-breakers and the unions which stood by and let them do it. This is distinctly vote buying, and of such is the New South Wales Labour Government.

THE BASIC WAGE.

At a recent mayoral banquet held at Albury, the late N.S.W. Minister for Works, Mr. R. T. Ball, in speaking of the difficulties the State was having, struck the nail on the head when he said "the basic wage had caused more unemployment than anything else." Of course it has, because there is no give and take in the Act. Thousands of men throughout the State who were kept on as pensioners at a few shillings a week, with their home and tucker, have had to go, although for years in their old age they had looked forward to ending their days in comfort with their old employers. These men are now forced into the various asylums or wander about living on charity. Large bodies of farmers and others in the country could probably afford to employ men at 7s. or 6s. a day, but cannot possibly pay the basic wage; therefore the work is neglected. The result is that a few get the basic wage, and a large number get nothing. It is one thing to determine a basic wage, and another to give effect to it.

MUNICIPAL ELECTIONS IN QUEENSLAND.

The Labour Party in Queensland has always advocated adult suffrage in municipal elections without having had the opportunity of putting the scheme into practice until last year, when the necessary bill was passed. Worked out in practice, it will be found that men will be elected to the various local councils who have no stake in the area, who are bent only on creating a number of works to give employment. In fact, the provisions of the Unemployment Bill, which may be foisted on Parliament in the next session—it was defeated previously—lay it down that the local councils shall carry out works as directed. The policy of the councils will mean that numbers of men will be attracted from the country to the cities, to the detriment of the country, and that ex-

penditure will mount up and the value of property go down as taxation is increased to carry the added burden. Municipal taxation in Queensland, like the State taxation, is already heavy; it looks as if it will be much heavier. The Government has opened the way by raising the limit of taxation for municipal purposes.

NEW ZEALAND'S TREATMENT OF TOURISTS.

Mr. H. S. Fitter, of Messrs. Fitter & Sons, Smithfield, London, who with his son, Mr. S. H. Fitter, has been making a business trip to New Zealand, returned to Sydney last month, and leaves for England by the s.s. "Ormonde" this week.

In an interview he had with us he stated he found New Zealand in many things flourishing, but in some much the other way. He was delighted with his trip, but strongly expressed the opinion that their railway travelling badly needs improvement. The glorious scenery of the rivers and gorges, the wonders of the hot springs, and the magnificent views from the hills are undoubted attractions if one could travel in comfort to see them. It is all very well for the Government to say they cannot afford luxurious accommodation, but cleanliness and good food, which are the main improvements required, would cost little more, and people would always be prepared to pay for decent meals. Australian railway travelling is just as bad, and likely to be, so long as the majority are satisfied. The fact is that discipline is wanting, and employees do as they like on State-owned lines in these countries.

AUSTRALIA AND DROUGHTS.

The following is a fair sample of the accuracy with which so many oversea papers chronicle Australian affairs! It appears in "The Australasian" published in New York, U.S.A.:—

In the past, drought has at times done much damage to the flocks in certain years, but with the planting of deep-rooted grasses and alfalfa . . . and with the extension of railroad facilities for lifting flocks quickly to market or to other pasturage, the situation has improved in respect to ability to meet drought conditions. It is not expected that again will occur any disaster such as took place in 1902, when millions of sheep perished because of the drought."

This "yarn" about the railways is an old favourite. As a matter of fact, we know only too well that our railway facilities are totally inadequate to meet the requirements of the starving stock traffic in drought, and there is not likely to be any noticeable improvement as long as the right of construction of lines of any description remains solely in Government hands. One State alone, New South Wales, lost about 10 million sheep in the drought that ended last year, a large proportion of them because there were not sufficient cross country railway lines to remove starving stock to relief country.

FUTURE OF THE PACIFIC TRADE.

It rests with the various maritime unions whether the island trade with Australia is to be continued, or whether the whole of it is to be removed to some other country, where the steamers would be welcomed and not continually penalised. Messrs. Burns, Philp and Co. have for 30 years been fighting hard to build up a big trade with this country, and they have now come to an impasse. Two years ago some ten steamers were employed in the island trade. Now there are only five. Strike troubles, one after the other, have so handicapped this trade that it has been found almost impossible to bring island produce to Sydney, and a large proportion of the trade is now done direct with Europe and America. This is all due to the folly of the unions, and surely is utter madness.

On top of the labour troubles, Australian trade is very severely injured by the conditions arising through the new Navigation Act, the Sydney Harbour Board, and other governmental and State disabilities. It certainly looks as if Australian Governments are out to kill, and not to assist, magnificent enterprises such as Burns, Philp and Co. are trying to run.

Negotiations are now being carried out, we understand, as between this firm, who are the Commonwealth contractors for the island services, and the various unions connected with seafaring operations as to whether it will be possible to continue the trade as between Australia and the Pacific.

News Gittings.

The Czecho Slovakia Republic, according to the 1919 census, carries 3,329,000 head of cattle, 717,000 sheep, 1,419,000 pigs, and 945,000 goats.

South African live stock returns for 1920 show 28,491,000 sheep, which is a considerable decrease as compared with 1918, when there were 31,981,000 sheep in the Union.

The recent outbreak of **rinderpest in Belgium** is traced to live cattle from America in transit, or actually in the docks at Antwerp, coming in contact with a cargo of infected Zebu cattle passing from India to Argentina.

Matters are reported to be well in hand for the collection of the **Commonwealth Census** on 4th April next. It is anticipated that about 5,400,000 personal slips and 1,000,000 dwelling slips will have to be filled in and analysed.

Mr. J. R. Howard, president of the American Farm Bureau Federation, takes a decidedly **doleful view of farming** in the United States. He estimates that, of the 6,000,000 farmers in the States, 1,500,000 are bankrupt owing to declining prices.

Official estimates, based on returns collected from farmers, show that the numbers of **cattle and pigs in Canada** decreased during last year, while sheep increased. The figures are:—Cattle, 1919, 10,084,000; 1920, 9,477,000; pigs, 1919, 4,040,000; 1920, 3,517,000; sheep, 1919, 3,422,000; 1920, 3,721,000.

The Bristol and Dominions Producers' Association Limited, which has been operating principally in New Zealand and the west coast of England, has gone into voluntary liquidation. Heavy losses since 1919, owing to falling markets and diminished sales of produce, are given as the reason for this step.

The report of the Department of Agriculture, Queensland, contains the statement that a fly, identified as a member of the "Tabamdae" family, has been proved a carrier of the parasite, *Onchocerca gibsoni*, which causes **nodules in beef**. The discovery was made by Inspector Rheuben, an officer of the Department.

In a paper read at the Science Congress in Melbourne last month, Colonel L. W. Bickle said that he had seen **biscuits made from the dried product of prickly pear**. The biscuits, which were very palatable, were made from a flour that was capable of being reduced to a fineness equal to that of the best wheaten product.

A paper issued by the Cambridge University Press, by Mr. J. Hammond, deals exhaustively with the growth and development of various breeds. An interesting point is the great increase in weight of Herefords exhibited at the Smithfield Show. It is shown that the carcase weight in 1840-42 averaged 939 lbs., and during the period between 1893-1913 increased to 1181 lbs.

It is generally considered that the **leaves of the papaw tree** have the property of making meat tender. Recent tests carried out in London prove that this is a fact, and is due to the presence of a nitrogenous ferment known as papain, which in its physiological action closely resembles the secretion of the intestines in animals. There are now specimens of papaw trees growing in Kew Gardens, London.

The report of the Queensland Director of Forests, Mr. E. H. F. Swain, contains a suggestion for **reclaiming prickly pear land** by means of heavy timber plantations. With a view to testing the practicability of this the forest service will, during the coming year, sow and plant experimentally on pear-infested soils drought resisting, hardy and leaf littering trees like silky oak, camphor laurel and Canary Island and other exotic pines.

The claim of the **British South Africa Company** to administer some 72,000,000 acres of land in Southern Rhodesia, has, after lengthy litigation, been settled by an English Royal Commission. The award, which applies to the administration of the disputed territory until the end of March 1918, is given in favour of the company. The amount claimed was £7,866,000, but the commission finds the amount due to be £4,435,000, without interest.

Our London manager has received the following letter from the Private Secretary to the **Prince of Wales**:—"I am desired by the Prince of Wales to thank you for having sent him the copy of the September number of the "Pastoral Review," containing some photographs taken during His Royal Highness' visit to Canonbar Station, which he was interested to see. Would you be good enough to convey an expression of His Royal Highness' thanks to the editor."

A report by experts connected with the University of Leeds, England, on **samples of wool collected in Peru**, predicts that if the scheme for the improvement of the indigenous Peruvian flocks be reasonably successful, there is every likelihood that in ten years time Peru will be providing the finest carding and combing wools for the markets of the world. The principal types of Peruvian sheep are indigenous Merinos, dating from flocks formed in the sixteenth century, improved Merinos, based on the South American types, and Romney Marshes.

It is expected that the **world's heavy weight bullock champion** will be seen at the Sydney Royal Show next Easter. This bullock is a six-year-old, exhibited at the recent Wanganui (N.Z.) Show by the well-known Hereford breeder, Mr. Frank Moore, of Bushy Park. He is a Shorthorn-Hereford cross, and at Wanganui weighed 3642 lbs., being thus 86 lbs. heavier than the famous Irish-bred roan Shorthorn, "Pat the Giant," which at the Birmingham Fat Stock Show in 1912 is said to have scaled 3556 lbs. Mr. Moore's bullock, which was bred by Messrs. Bayly Bros., of Wanganui, will, it is said, carry a lot of beef yet, as he came off the grass. He may be fed on concentrates for the Sydney Royal.

There has been a great outcry in the English press about the disposal of vast **quantities of meat in France** that remained on the hands of the British Government after the war. A shocking example occurred at the Abbeville Dump, where nearly three quarters of a million pounds of meat lost all its value other than manurial. A bulk sale was held, with an elaborate auctioneer's catalogue, and the total result was £70! The Ministry of Munitions, which was accused of dilly-dallying in effecting the sale, has replied that the meat in question was really sold to a French purchaser a year ago. The major part of the purchase money has been paid, but the purchaser has failed to take delivery of a residuum of the stock, and it is only the residuum that has been auctioned.

Mr. W. J. Young, general manager of Elder, Smith and Co. Limited, who, as one of the members of the Central Wool Committee, went to London to develop the plan for **handling the Australian wool** in reserve, expresses the highest appreciation of the way in which the Imperial authorities met him and other members of the Australian Wool Committee there. They were welcomed in the most sympathetic manner, especially by Lord Inverforth, Minister of Munitions, and by Sir Arthur Goldfinch, Director-General of Raw Materials, who realised that the wool was sold willingly under war conditions, and agreed that the carry-over wool ought not to be marketed to the detriment of the new wool that had to be sold. Mr. Young meets the objection that the wool should have been sold by declaring that every effort was made to dispose of it expeditiously. He says that sales were held in a number of centres, and, in addition, wool was offered on catalogue descriptions without the wool itself being shown. He fails to see what more could have been done to avoid the present carry-over problem, and takes the view that the gratitude of Australian woolgrowers is due to Lord Inverforth and Sir Arthur Goldfinch for the great services they have rendered.

Personal.

Mr. A. W. Pearse has been elected a life governor of the Royal Sydney Hospital.

Mr. Paul Cudmore, of Victor Harbour, S.A., intends taking a trip to England this month.

Mr. Simon Gentle, grazier, of Dingi Dingi, Cootamundra, N.S.W., died last month aged 78 years.

Mr. D. W. A. Crombie, Kensington Downs, Western Queensland, is leaving for a trip to Europe.

Mr. H. Lee, general manager of the London Central Meat Company, has been visiting New Zealand.

Mr. T. Griffiths, who had large interests in land and cattle on the Darling Downs, Q., died at Brisbane recently.

Mr. I. R. Currie, of Seven Creeks, Euroa, Vic., left by the "Naldera" for a trip to England on 5th February.

Mr. P. Ryan, of Elliott Creek Station, Gascoyne, W.A., died last December. He had lived in the district since 1886.

Mr. Germain N. McMicking, of Manus and Pullitop Stations, in the Tumbaramba district, N.S.W., died on the 10th inst.

Mr. H. V. King, eldest son of Colonel H. V. King, Spreydon, Newtown, Toowoomba, Q., died at Cunnamulla last month.

Major Ryrie, late of N.S.W., and who served in Egypt during the war, has settled on Laikipia Plateau, British East Africa.

Mr. Frank Goddard, manager of Bierbank Station, Charleville district, Q., has relinquished that position after thirteen years.

Mr. R. C. Bell, of Mooramong, Skipton, V., leaves shortly for a trip to the East, after which he intends to proceed to England.

Dr. Ramsay Mailer, of Melbourne, and Maneroo, Shepparton, V., sailed for London by the s.s. "Orsova" the end of January.

Mr. E. Hope, who for many years was on the wool valuing staff of Harrison, Jones and Devlin Limited, Sydney, died suddenly the middle of last month.

Mr. T. E. Barr Smith, of Adelaide, and **Mr. Frank W. Whyte**, a well-known South Australian pastoralist, left last week by the "Naldera" for London.

Mr. H. W. Herbert, F.I.A.N.Z., A.I.C.A., of Sydney, has been appointed assistant manager of the Union Trustee Company of Australia Limited, Brisbane.

Among the passengers who left this month for Europe by the P. and O. s.s. "Naldera" are **Mr. and Mrs. L. N. Hill**, Moree, N.S.W., and **Mr. and Mrs. S. Maddrell**.

Mr. J. Stumm, of the Gympie district, Q., died suddenly last month. His daughter married Senator Major-General Sir T. W. Glasgow, of Ivanhoe Station, Kinbombi.

Mr. S. W. B. McGregor, Senior British Trade Commissioner in Australia, arrived back in Melbourne last month, after a four months' trip to the United Kingdom and India.

Mr. Hugh A. Warnock, grazier, of Osborne, Coonamble, N.S.W., died early in the month, aged 61 years. He was born in County Tyrone, Ireland, and came to Australia in 1867.

Mr. O. Morrice Williams, late general manager of the London Bank of Australia, has been appointed to a seat on the Melbourne board of the United Insurance Company Limited.

The Hon. Sir Herbert Alexander Lawrence, K.C.B., has been appointed to the London Board of Dalgety and Co. Limited in place of **Mr. Maurice G. C. Glyn**, who died recently.

Mr. Alfred H. Chambers, general manager in Australia for the Union Bank of Australia Limited, left on the 5th inst. by the s.s. "Naldera" for a trip to England with his wife and family.

Mr. W. T. Appleton, managing director of Huddart, Parker Limited, Melbourne, has been appointed chairman of the Commonwealth Steamship Owners' Federation for the fourteenth occasion.

Sir Kenneth Anderson and **Mr. J. C. Geddes**, directors of the Orient Steam Navigation Company, arrived from London on board the s.s. "Ormonde" last month to inspect their interests in Australia.

Mr. H. S. Fitter, and his son, **Mr. S. H. Fitter**, of the well known Smithfield meat firm, who have been on a visit to New Zealand, are at present in Australia, and return to London by the "Ormonde" this week.

Mr. Samuel Cooke, chief manager of the Union Trustee Company of Australia Limited, left Melbourne by the s.s. "Aeneas" for Great Britain on the 5th of February. He expects to be away about nine months.

Mr. Charles A. MacDonald, who was well known in Australia as the engineering representative for the Hercules freezing machinery, died recently in Africa. He was born in Scotland in 1848, so was 73 years of age.

New Zealand Loan and Mercantile Agency Company Limited has received cable advice from its London office that **Lord Ritchie of Dundee** has been appointed a member of the board of directors of the company.

Mr. G. A. Prittle Hirst died at Rocklea, Queensland, on the 9th of last month, aged 79 years. His family were amongst the earliest settlers on the Darling Downs, and originally owned Pilton Station, Pittsworth.

Mr. E. J. Lowe, late of Birriwa, Mudgee, N.S.W., returned from a year's trip to Europe in the "Naldera" last month. He had a glorious trip, and was delighted with Switzerland, England, Scotland and Wales.

Mr. Peter Waite, after many years of exceptional service, has retired from the chairmanship of Elder, Smith and Co. Limited, Adelaide. **Mr. T. E. Barr Smith** will take his place, but Mr. Waite retains his seat on the board.

Mr. W. W. Davis, late of Kerribree Station, Bourke, N.S.W., who is in his 81st year, has been granted an allowance of £2 per week by the New South Wales Government for his services in being one of the pioneers of artesian boring in the State.

Mr. R. D. Hay, chief of the Forestry Commission, and **Professor Ernest H. Wilson**, a distinguished American authority on agriculture, have arrived in Sydney. Professor Wilson, who is assistant director of the Arnold Arboretum at Harvard University, U.S.A., is touring the world to examine timber resources.

Mr. R. Blake, of the London Institute of Civil Engineers, has arrived in Australia. He has been appointed a member of a Special Commission to investigate the break-of-gauge problem. **Mr. F. M. Whyte**, an American mechanical engineer, who is acting on the commission with Mr. Blake, is also in Australia.

Mr. N. G. Wetherell has been appointed manager of the Townsville branch of New Zealand Loan and Mercantile Agency Company Limited in succession to **Mr. Henry Schmidt**, who has retired from the company's service. Mr. Wetherell was for some years in charge of the Merchandise Department of Rockhampton branch.

Mr. Arthur Cotton, of Belmont, Riversdale, Tas., who was a well-known landowner and farmer in the southern portion of that State, died on 6th December after a short illness. He also sat in the State Parliament for several years as a member for Franklin, but was defeated at the last general election. He leaves a widow and three children.

Mr. John Mair has retired from the management of the Sydney office of the Union Trustee Company of Australia Limited, and has accepted a seat on the company's local board of directors. Mr. Mair established the company's Sydney office six years ago, and has had the satisfaction of seeing the rapid growth of its business to its present large proportions. He is being succeeded by **Mr. A. E. Norden**, F.F.I.A., A.C.I.S. (Eng.), who has been the company's assistant manager at Brisbane.

Visitors to Melbourne Office.—From Victoria:—Messrs. T. A. Bouchier, Yarroweeyah; Senator J. F. Guthrie, Geelong; S. Stott, E. Jackson, T. L. Graham, Dr. Lang, all Melbourne. From Queensland:—Mr. Clive Currick, Nappa Merrie. From N.S.W.:—Mr. A. S. Mackie, Wunnamurra. From England:—Messrs. H. Shipley Fitter, and S. H. Fitter, London.

Visitors to Sydney Office.—From New South Wales:—H. C. Wilson, Wyaldra Park; R. C. Wilson, Wyaldra Park; C. Fetherstonhaugh, Mungerie; D. A. White, Willeroo; I. H. Thomas, Kookendoon; Major Fetherstonhaugh, Mungerie; T. Bowling, Arrawatta; T. M. Scott, Burroway; D. Macfarlane, Wairoa; J. G. Fletcher, Walkeela; J. H. Fairbairn, Micalago; W. R. Glasson, Gamboola; F. D. McMaster, Dalketh; H. Smith, Geurie; C. J. Crocker, Moss Vale; J. Abbott, Murrulla; A. L. Platt, Stonehenge; E. Anderson, Tandora; J. Parker, Tordown; J. Dunne, Netley; J. Shupson, Stonehenge; J. B. Sautelle, Burnhma; E. J. Lowe, Birriwa. From Sydney:—R. H. Harrowell, Professor J. D. Stewart, R. Traynor, Major C. Spier, L. Davies, J. W. Holliman, G. M. Badgery, O. E. Friend, C. E. H. Maitland, A. Lang. From Queensland:—Colonel W. G. Thompson, Rockhampton; G. A. Taunton, Longreach; W. MacVean, Ardour; Rev. Halse, Townsville; C. R. A. Brown, Isoroy; Capt. G. Smith, Landsborough Downs; E. E. D. White, Bluff Downs; T. Forster, Gracedale; H. M. Begbie, Eddington; A. P. Quinn, Lanneston; Hy. Friend, Vahrepa; Hugh Mackenzie, Tooloombah; J. C. Drysdale, Pioneer Estate; Frank Wilson, Penlan Downs. From Victoria:—D. C. Moppeth, Melbourne; A. H. Chambers, Melbourne; A. Brown, Melbourne; Leslie Smith, Melbourne. From England:—H. S. Fitter, S. H. Fitter, London. From Canada:—M. E. Mountcastle, Montreal. From South Africa:—E. N. S. Warren, Grootfontein.



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Kiltic is homogeneous, i.e., when once mixed it requires no stirring.

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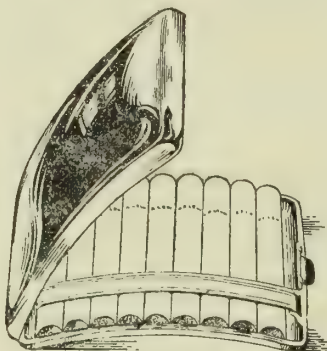
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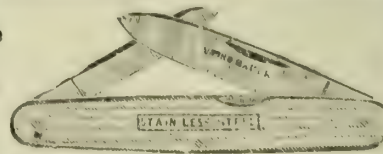
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SYDNEY WOOL MARKET**HARRISON, JONES & DEVLIN**
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A very important matter, and one that is engrossing the attention of woolgrowers at the present time, is the method to be adopted by the Federal Taxation Department in assessing for income tax dividends received by woolgrowers from the Imperial Government on the resale of the surplus stocks of Australian wools.

In the "Argus" of 25th ult., over the signature of "Wool Grower," appeared a letter in which it is stated that the Federal Commissioner of Taxation proposes to tax the recent 5 per cent. dividend out of surplus profits by apportioning it over the four years commencing 1916-17 and ending 1919-20. The correspondent goes on to discuss the absurdity and the inconvenience of such a method, and he appears to think that it has been settled that the department proposes to act in the manner indicated.

This matter has, however, been receiving the attention of pastoralists for some time, and it is understood that legal opinions have been obtained to the effect that the dividends paid to Australian growers out of profits on the resale of wool by the Imperial Government are taxable only in the hands of growers in the year of receipt by them. This is, of course, as it should be. There is no possibility of apportioning dividends over the clips which were taken by the Imperial Government, and no equitable method could be devised by means of which this could be done.

In his evidence before the Royal Commission on Taxation on 24th January last, the Federal Commissioner of Taxation stated that in view of counsel's advice, and of a ruling by

the Crown Law authorities, he proposed to tax such dividends as income in the year in which they were received, and he further added that these dividends had no relation to past years at all. This should set at rest the minds of all woolgrowers, as they need not fear any apportionment or reopening of past assessments in connection with this matter.

A further point, however, arises in regard to whether or not these dividends are subject to War-time Profits Tax. This matter has also received very careful attention, and it is understood that legal opinions are unanimously in favour of the view that, seeing the income did not accrue until after the operation of the War-time Profits Tax had expired, viz., after 30th June, 1919, there is no liability whatever for payment of War-time Profits Tax on these dividends. As the War-time Profits Tax Assessment Act does not tax profits made after 30th June, 1919, and as these profits do not arise in the hands of the graziers until after that date, and also seeing that the profits cannot be located to any specific clip or to any specific grower, and are dividends out of a pool in which all graziers participated, there seems to be no doubt whatever that no liability to war-time profits tax accrues in regard to these dividends.

The Federal Commissioner, in his evidence on the date referred to, further dealt with the question of the year in respect of which "retention money" should be taxed. He stated that "retention money" was taxable in the year in which it was retained, and also that he was informed that the majority of the graziers brought this retention money into account in the year of appraisalment. Inquiries tend to show that this is correct, and that only those growers who have not shown as income in the year of appraisalment any retention moneys need fear any reopening of their assessments on this account.

The Cattle Industry in Australia and South Africa.**Some Comparisons.**

BY A CORRESPONDENT.

Any close study of cattle breeding in the Southern Hemisphere indicates that the European market will in the next decade be closely competed for by Australia and Africa on the one hand, and Latin South America on the other. The two countries which have within the war period stepped into the ranks of beef production are Brazil and South Africa. The industry in Brazil is being engineered mainly by American capital, whilst in South Africa, eliminating Liebig's and the Chartered Company in Rhodesia, it is fostered by capital principally raised in the Dominion and adjoining territory.

At the present time Africa is keenly interested in all that Australia is doing. "The Pastoral Review" has a considerable circulation in that country, and matters pertaining to the affairs of the Australian pastoralist are studied with interest. As a matter of fact Africa has a close acquaintance with Australia's contemporary records. It is not perhaps remarkable that Australia is somewhat indifferent to kindred operations in the sister Dominion. One or two scouts who have visited the Union and Rhodesia have returned with such discouraging reports of the effect on the industry of tick-borne diseases that Australians have arrived at the conclusion that Africa, as a producer of beef, is a negligible quantity.

It is true that tick-borne diseases in the past have been a scourge to cattle raisers. It would be surprising if it were not so. Africa has been, and in many parts still is, the supporter of the most astonishingly numerous herds of ruminants

known to the zoologist; she has sustained more grass feeders (in weight at all events) to the square mile than any other portion of the two hemispheres, and these ruminants, propagating parasitic transmitters of micro-organisms in the packed feeding grounds, against which heredity has in ages conferred on the fauna an immunity, has led to severe losses amongst the newer intruding bovines. But it is obvious that a country so favoured in the food value of its grasses that its indigenous herb, grass, and grain feeders swarmed by the million over its surface, would some day be sufficiently tamed to support the domestic animal. All that was required to safeguard the bovine was some prophylactic which would combat the ravages of indigenous diseases. That safeguard has been discovered, and to-day the careful stockmaster, intelligently applying the remedies provided by science, has no more to fear from local disease than his confreres in Australia or America.

In 1903 at the conclusion of the Boer War, save for a portion of the Cape Colony, Natal, and the coastal native territories, South Africa was depleted of cattle. East Coast fever, a war-spread blood disease, subsequently decimated the remaining stock in the native territories, portions of Natal, and on the Cape Colony north-eastern coast. The war and disease left South Africa with little over two million head. Australia had to feed her. To-day Africa, south of the Zambesi, has over ten million cattle. At Africa's present rate of increase she ought in 1926 to have twenty million head. In 1900 Australia had eight and a-half million head. In 1918 she had twelve million head. Apparently Australian drought is more potent than African disease.

How has this recovery been accomplished? A remarkably efficient scientific Government staff, organised originally by Lord Milner, whose far-seeing statesmanship equipped the agricultural and live stock departments with distinguished and enthusiastic workers, has trained the farmers and pastoralists of the continent in the modern arts of their craft. That primarily is the explanation. But the natural resources of the country, the complete sympathy of the Government towards all works connected with land development, and the type of man who is steadily moving out of the towns on to the land, have all helped towards the astonishing developments of the cattle-raising industry in South Africa. How different the story in Australia. "I like to hear the squatters squeal," said a responsible Australian Cabinet Minister quite recently. Africa wants to see the squatters prosperous. Here the influx is into the towns. In Africa most townsmen's ambition is to get on to the land. Here the country is taxed for the towns. There the towns bear the main burden, the argument being that if production from the land is not encouraged a purely artificial town existence must arise. "The land is our wealth," is the African maxim; hence this signal improvement.

Like Australia, Africa is on the threshold of her greatness; like Australia, she lacks population. But whilst the immigrant entering the Commonwealth seeks to make the town his settling place, the African settler is country bound. He is invariably a man of means, and even though his means may be moderate his inevitable inclination after being in the country for a little while is to breed beef cattle. The facilities offered him are numerous and attractive. There are immense tracts of Rhodesia awaiting the settler, in the South-West Protectorate, in Bechuanaland—all cattle country. To the man with means the South African conditions of land tenure appeal; he buys the land, he buys the freehold, and the farm is his. Leasing, except of small coastal areas and of market garden lands in the vicinity of towns, is unknown. The African insists on freehold. So it comes about that in comparison with the Australian run his holding is small, and in comparison with the big Australian cattle man he is comparatively a "cocky"—20,000 acres is a big station, the average is about 4000. But what he has is his own. Every improvement he puts into his farm, every increment that the land earns is his, and he prospers slowly but securely. Australian conditions demand big areas; droughts alone restrict the acreage per head which a run will stand. Droughts in the Australian sense do not disturb the South African. In a recent report prepared by an Australian State Commission appointed to investigate the land requirements per head for

cattle on proposed State-owned cattle runs, it was reported that the average station wanted 30 acres to the beast to ensure the constant maintenance of herds of a given number on a given area. In South Africa the general average is one beast to ten acres. It varies somewhat with the rainfall. In the South-West Protectorate and the dry parts of Bechuanaland about one beast to 20 acres is the rule; in the south of Southern Rhodesia, one beast to 15 acres; in Eastern Rhodesia, one beast to 7 acres; along the western escarpment and Mid and West Rhodesia, one beast to 8 acres; and on the coastal bush plains, one beast to 4 acres. On such areas animals are maintained fat all the year round. The South African plateau is not cattle but sheep country. The cold is too intense in the winter. In Natal and the Eastern Cape land is too valuable for anything but stud breeding.

Whilst the Australian with a herd of 20,000 head employs a manager, bookkeeper, and probably half a dozen boundary riders and rouseabouts an African cattle run with that number would have fifteen white men and 200 black fellows. The Australian would write off 10 per cent. for annual loss. The South African 4 per cent. The Australian calving would probably be recorded at 55 per cent. in a good year and 30 per cent. in a bad one, or an average of 42½ per cent. The African would get a calving average of about 75 per cent. The handling of his cattle would cost him much more, but this disability is not altogether disadvantageous. It enforces the necessity of stock improvement. He is quickly learning that it costs as much to provide grass for a hundred bad cattle as for an equal number of good ones, so he is out for improvement. In the northern territories an Australian rarely sees his cattle for five months during the "wet," and on most stations a muster is an event. On a well-run African station every beast is put through an arsenical dip generally once a week, at least once a fortnight. Each 5000 head have two white men and from 20 to 40 blacks to handle them. The death of every beast is reported, a blood smear taken, and a post-mortem made and sent to the headquarters station, where the smear is examined microscopically, and the p.m. recorded. Once a week the 20,000 or 30,000 are counted at the dip and every calf is tallied. The cattle are all tame. A sick beast is immediately noted and passed into hospital, and the intimacy between the cattle man, whether white or black, and the herds is complete. For these reasons Africa must raise good cattle, and if she continues to maintain her present rate of progress she must ultimately prove a formidable factor in the meat markets of the world.

The dairy industry, too, is being developed. In South Africa the milk producer is the Friesland—the Holstein of Australia and America. There are a few Ayrshires, but the Guernsey is not popular. In 1911 the record price paid at the Bloemfontein sales for a Friesland bull with a milk record was £150. "The Pastoral Review" of the 16th December states that at the dispersal sale of a stud herd in October last at Bloemfontein a Friesland bull was sold for £7750, whilst a herd of cows and calves averaged £500 per head. To explain these high values we have to consider a side issue in the craft of cattle breeding which South Africa has adopted. We refer to the recording of stud animals. The stud books are framed on the standard requirements of the mother stud books in the country of the breed's origin, so that any animal registered in the South African book is eligible for entry in the stud book of the breed in the country of its genesis. The book is protected by Act of Parliament, and the breed societies are incorporated by Act of Parliament, so that the country has one uniform record system. The African breeder, through the official scrutiny and indorsement of all records, knows what he is buying, and can afford to pay for the best, as the progeny of his herds are available to any foreign buyers who demand registered standardised pedigrees.

The wool industry, dairying, beef, cotton, maize, and fruit will form the main export industries from the land. The sheep farmer generally confines himself to his speciality, and the dairyman and fruitgrower to their respective crafts, but the cattleman helps himself along with cotton and maize, and on those lines is intelligently and profitably pioneering the rougher portions of South Africa.

Stomach and Intestinal Worms in Sheep.

The above subject is unfortunately evergreen, and in many parts of the country owing to the wet season that has been experienced is giving a good deal of trouble.

A review of the life history of the stomach worm indicates three points of great practical importance—(1) In wet seasons one must be prepared for an increase in the number of such parasites. (2) That moist places are always to be considered a harbour for the larvae of the worms. (3) That if one is trying to eradicate worms from a paddock by starving them out, i.e., by removing all stock to fresh dry paddocks, the infested paddock will need to remain free from sheep or cattle for a relatively lengthy period.

The condition produced by such worms is a chronic inflammation of the true stomach, accompanied by diarrhoea, wasting and anaemia. Young sheep suffer most severely from the effects of these stomach worms, but adult animals are frequently affected also. The first signs of the disease are an absence of yolk in the wool, and a disinclination in the sheep to travel; also if the eyelid is lifted up and no veins show, or if the veins are very dark, worms are probably present. A good way to detect tape worm in its initial stages is to yard the sheep over-night and examine the excreta carefully in the morning. If worms are present it will be slimy, and the white minute sections of the tape worms will be seen. Another test is to open up the wool, and if the skin is found to be a dull or whitish colour, the owner had better drench at once, as described later on. The most careful preventive measures should always be taken by owners in country that is liable to worm infestation. Nearly all the harmful worm parasites require moist ground or stagnant water to live in while they are in the egg stage. Hence, a great thing is to keep the sheep on country that is free from such natural harbours. The farmer with a bit of wampy ground, therefore, should regard the fencing or draining of it as one of the jobs that there is money in, and that should be undertaken as soon as opportunity offers. Pipe-draining is not necessary, as many may imagine. An equally effective and much cheaper plan is to place two straight saplings, 8 or 9 in. thick, 3 or 4 in. apart, in the bottom of a channel cut for the purpose, and then a third sapling on top to keep the other two apart; a good covering of scrub or rushwood is put over this, and finally the channel is filled in with earth. In this way a very inexpensive and efficient drain is made that will last for years. Surface draining by running plough furrows according to the contour of the land can be done at a moderate cost, even on large areas.

On land that is at all infested by worms, the sheep should not be allowed to water at mudholes. They should be given proper troughs for the purpose. Stock always prefer clean water, and once they become familiar with troughs they will come to them to drink rather than to contaminated water. A few trials, provided they are persevered in, will prove this. Paddocks known to be infested should be spelled. Horses and cattle may be grazed thereon, but cultivation would be much more effective. Even one year's spelling is valuable, though two years is better. An occasional burning-off of the pastures is also a good move, as many of the embryos are destroyed.

Young weaners are the most easily affected. Country full of melon holes is always wormy. If the sheep are kept on cultivated ground they will not get worms, but get daggy instead, and then have to be crutched. On this class of country, and even inland in a drought, give the sheep plenty of salt, and as much variety of feed as is possible by shifting them about. However, do not shift them unless absolutely necessary when about to lamb.

Another thing, established by experiment, is the value of laying down a certain area with good introduced grasses, clovers or lucerne, where the natural herbage is poor and unwholesome. Definite measures to get rid of worms are not easy, but a good supply of nourishing feed (mixed, in a wet season, with dry feed) will do much to prevent infestation. Of course, this and some of the other suggestions given are

only practicable on comparatively small areas, but if those in regard to stagnant water, spelling of paddocks, &c., are observed, the general run of grazier for whom this advice is chiefly intended, should be largely free from parasitic troubles. Over-stocking must be avoided, for it impoverishes the sheep, and makes them more liable to attack.

Even with the above precautions, when seasons are wet and green grass is plentiful, the careful sheep-man should examine every sheep that dies or is killed, and if worms are detected, the sheep should all be given a drench. If the greater number are not in any need of treatment so much the better, but those that are treated in good time will improve rapidly, no serious loss will be experienced, and the unaffected sheep will not have been damaged in any way by the drench. Lambs are particularly susceptible to the trouble, and they should be watched and drenched early before their constitutions have been damaged. No shearing should be allowed to pass without very close scrutiny of the lambs in case this pest may be present, and if the slightest sign of worms is apparent in the lambs, drench the lot. If the season is a very wet one they may need treatment shortly after being marked, and if so they should get it. Early treatment before the sheep, and particularly lambs, show outward signs of worms is the most important consideration. As already pointed out, frequent change of paddocks is very helpful, and if the worms are firmly established, it may even be necessary to move the stock to a dry district, saltbush country for preference, to save heavy losses. Early autumn is a troublesome time with stomach worms, and they are sometimes found even in early spring, especially in lambs weakened by privation. The intestinal worm, judging from scientific post-mortems, is not as a rule a serious trouble in young sheep, but the tape worm, which infests lambs at an early age, is the cause of considerable loss.

Treatment for stomach and intestinal worms consists of drenching. Probably the most effective drench is that having arsenic as its chief constituent. Take $\frac{1}{2}$ lb. washing soda and boil in 7 quarts water; when the water starts to boil, take off the fire and put in arsenic ($\frac{1}{2}$ lb.) slowly. Boil slowly for half an hour, strain into another tin, and make up to 8 quarts. To use, take 1 quart arsenic water, and add 12 quarts water, and give lambs $1\frac{1}{2}$ -oz. dose, grown sheep 2 ozs., and lambs under six months 1 oz.

Give them another dose in about ten days' time, and if no or little improvement, another dose in about another ten days. Yard sheep the night before drenching, and keep off feed and water for four hours or longer after drenching. Use rain water for the mixture, and in administering allow the sheep to stand on its four legs. The head should not be forced back, nor the drenching hurried, as either is likely to cause choking and possible death.

Another recipe is:—1 oz. white arsenic, $1\frac{1}{2}$ figs strong tobacco, and 2 ozs. washing soda, to be boiled in 4 gallons water. Boil for 40 minutes on good strong boil. Allow and make up for what has been lost by vapour while boiling. Yard sheep over-night and dose on empty stomach if possible, but do not let lambs be too hungry. Dose for lambs three months old, 1 fluid oz.; lambs five months old, $1\frac{1}{2}$ ozs.

Great care should be taken in preparing arsenic drenches that all the arsenic and soda are dissolved. The fluid should then be filtered through a cloth to remove any large particles, or the sediment allowed to settle, and only clear liquid used; also to make sure of a minimum loss, in case of a mistake in mixing, always dose a few sheep a day or so before doing the flock. The drenches given will not injure the constitution, and if properly used, are quite safe. It is as well to drench hoggets in the spring, if dealing with wormy country, and breeding ewes when tailing the lambs.

Other recipes are:—

(1) For lambs—1 lb. (avoirdupois) pure bluestone and 1 lb. Colman's mustard (fresh); mix well with 12 gallons rain water. Dose: For lambs three to six months old, 2 ozs.; six to nine months, 3 ozs.; nine to twelve months, $3\frac{1}{2}$ to 4 ozs. For sheep the solution should be 1 lb. bluestone and 1 lb. mustard in 10 gallons of water, and the dose 4 ozs. The quantities of bluestone and water and the doses should be accurately weighed and measured, and the dissolving

should not be done in an iron or galvanised vessel, though an enamelled bucket will answer very well.

(2) For lambs $\frac{1}{4}$ oz., and for sheep $\frac{1}{2}$ oz. gasoline, to be given in oil, linseed, tea, or milk. The dose should be given once daily for three days. The evening before the first treatment the sheep should be shut up without food or water, and dosed about 10 a.m. next morning. Three hours later they could be allowed food and water, but should be shut up again at night, and dosed the second and third mornings as on the first.

(3) A good drench for intestinal worms is:—2 ozs. arsenic, 5 lbs. Epsom salts. Boil in 1 gallon of water for 40 minutes. Strain and make up to 5 gallons. Give grown sheep 2 fluid ozs., 2-tooths $1\frac{1}{2}$ ozs., and lambs up to twelve months old 1 fluid oz. Proper tin dosers, made to measure the correct quantity of the mixture, should be used. Drenches containing turpentine are likely to cause irritation and coughing, no matter how carefully administered.

There are some very effective worm pills and tablets on the market, and they have many points in their favour, there being little danger of choking; they are easily carried, and they can be given in paddocks whenever a sheep is noticed to be ill. To administer a pill, don't throw the sheep, but stand over it, and using a leather thumb-stall, force open the mouth by placing the fingers in the roof and the thumb against the front teeth, and throw the pill in on the back of the tongue.

Shorthorn Types.

There are men who "own" cattle and men who "improve" cattle, and there is a great deal of difference between them. We have frequently stressed the point that the "good enough" policy is no good to Australian cattle men if we are to compete successfully in the world's markets with countries like Argentina, and other countries such as Africa, Brazil, Paraguay, &c., which are later entrants into the arena, but are making rapid strides in the improvement of their stock, and sparing no expense to grade up the quality of their beef.

Australian beef has got a good name, but there is always room for improvement, not only in point of weight, but quality as well. This can never be achieved by using poor or scrub bulls, and it is unfortunate that some of the former class mentioned at the beginning of this article are inclined to adopt or follow such a policy as being on the surface more economical. As a matter of fact, we know it is "penny wise, pound foolish," and likely to prove far more costly in the long run.

Frank D. Tomson, writing in "The Shorthorn in America," deals with the same point under the heading, "It is the type that counts." He gives a number of rough sketches suggestive of different Shorthorn types, and says:—



Fig. I.



Fig. II.

Fig. I. shows the head of a bull inclined to coarseness and plainness. It will be noted that the face is entirely too long. A head of this character is often found on a bull of more than ordinary size, usually lacking in smoothness and inclined to be flat-sided. One does not travel far without observing in the pastures bulls with heads like this.

Figure II. shows a bull calf of apparent ruggedness. The head is quite satisfactory in conformation, but it will be noted that too much "leather" is below the jaw. This in itself is a suggestion of coarseness. It is a characteristic

that is found more frequently in a breed other than Shorthorn, but it appears too often in our own herds.

Figure III. shows a typical Shorthorn head of clean, attractive character, possibly too mild in its expression, but otherwise quite free from criticism. The horns are well turned, the face sufficiently broad and well dished.



Fig. III.



Fig. IV.

Figure IV. is quite similar in conformation, but reveals more alertness and energy, suggestive of prepotency. It will be noted that the nostril is wide open—a condition that is desired, furnishing an ample intake for fresh air. The eye is large and sufficiently prominent, indicative of virility and good health. The neck is full and well rounded, the crest well proportioned. One would expect to find a bull possessing a head of this character to be an impressive sire. This peculiarly clean-cut head, strong but quiet expression, is characteristic of the Shorthorn.

Figure V. shows a head that might be expected to add to a good feeder. Note the width of the muzzle, the large nostril, the broad face, the width between the eyes, and the base of the horns. This head denotes the feeder rather than the sire. It lacks something in assertiveness and impressive masculinity.

Figure VI. is of a different type, illustrating the sort to avoid. Yet in those sections where bovine improvement has not been carried on to any great extent, such heads as this



Fig. V.



Fig. VI.

are frequently seen on the cows that roam the woods or feed along the roadsides. There is a lack of good breeding clearly evident in the conformation and expression of this head. Note the distance between the eye and the nostril and the general indifferent, unresponsive expression as suggested by the outline.

Figure VII. approaches the ideal in the head of a Shorthorn female. Note its clean, refined, almost classy appearance, its sweetness of expression. Note here the large nostril and the full, expressive eye, the shapely horn, the graceful lines and the well-set neck. One would expect a cow possessing a head like this to be of pleasing conformation and a responsive breeder. It is significant that those who study deeply the problems of bovine improvement attach great importance to the character of the bovine head as indicative of the dependability of the animal as a producer.

(To be continued.)



Fig. VII.

Sheep Shows in Relation to the Importance of the Sheep and Wool Industry.

For some years past there has been a lack of interest taken by the sheepbreeders of Australia in the various sheep shows held in many parts of the Commonwealth. It has rested with a comparatively few enthusiasts in the industry to keep the shows going. The bulk of Australian sheepbreeders have been content to allow these few to bear the burden and supply the shows with the necessary sheep. The same breeders, with very little change, are represented from year to year, but rarely does one see a function at which there is a really representative exposition of the sheepbreeding industry as it should be, and as its huge importance demands.

It has been stated at various times that many breeders who have established a high reputation in the breeding of different classes of sheep, and whose success is recognised all over the world, are disinclined to send their stock to shows where the vagaries of judges may result in their sheep being unsatisfactorily placed. Judges are not infallible, and there is always a possibility of grave mistakes being made in judging, but speaking generally the awards are correctly made. If and when there is a Merino Sheepbreeders' Association it could nominate judges of its own choice, as is now done by the Longwool and Corriedale Associations, and if the judging were then unsatisfactory, the fault would be with the breeders themselves. But assuming that the judging were more frequently wrong than it is, the interests of the industry should surely be sufficiently paramount to suggest to breeders the necessity of making the shows from an educational standpoint a big success. This could be achieved by eminent sheepbreeders, who do not care to face the uncertainty of the judging, sending their sheep in for show purposes only, and not for competition.

In Great Britain and other parts of the world there is a very much keener recognition of the value and necessity of sheep shows, and the functions are important from every point of view. They educate young breeders, and even old experienced breeders can often gain a wrinkle or two in inspecting sheep bred by other men. It is astonishing how easy it is to discover that perhaps practically unknown breeders are developing sheep that are comparable with those of men whose names are in the forefront of the industry.

The opinion in Australia is that a special effort should be made to improve the sheep shows in the principal centres, and popularise them to such an extent that the people of the Commonwealth will realise that sheepbreeding and its attendant industries are beyond doubt the most important in this country. This is what Mr. D. Macfarlane, a well-known sheepbreeder of New South Wales, is trying to do in his capacity as a member of the New South Wales Sheepbreeders' Association. Mr. Macfarlane is convinced that if the proper lines are followed, and if breeders infuse more enthusiasm into the question of sheep showing, there is no reason why the shows should not become a power that will have a very important bearing upon the future of the industry.

At a recent meeting of the joint committee of the Royal Agricultural Society of New South Wales and the Sheepbreeders' Association, he suggested the adoption of certain methods which, in his opinion, would undoubtedly result in making the show a decided success. As is generally known, the Sydney Sheep Show has been run under the joint auspices of the New South Wales Sheepbreeders' Association and the Royal Agricultural Society for the past two or three years, and owing to a variety of reasons, for which the latter society is not in any way responsible, it has been run at a loss. He pointed out that this should not be, in view of the sheepbreeding industry being the most important commercial organisation in the Commonwealth. He considered that the aim should be to make the show the sheep show of the Southern Hemisphere, and make it more commensurate with the huge importance of the industry.

He placed before the committee some very interesting figures compiled by him from statistics furnished by the Federal Statistician. These figures revealed that over a

period of eleven years, 1908-1918, the yearly averages of exports were approximately as follows:—

Sheep.		Cattle.	
Wool	£27,250,000	Frozen Beef	£2,250,000
Skins	1,750,000	Hides	750,000
Frozen Mutton	2,000,000	Tallow	750,000
Tallow	750,000	Canned Beef	500,000
Canned Mutton	500,000		
	£32,250,000		£4,250,000

Agriculture, Grain, &c.

Butter and Cheese	£3,500,000
Grain, Flour, &c.	10,000,000
Horses	250,000

£13,750,000

Thus it is shown that taking the average annual value of exports in connection with the sheep, cattle, and agricultural industries, viz., £50,250,000, the sheep industry accounts for £32,250,000 per annum, or 65 per cent. of the total.

Mr. Macfarlane stressed the huge preponderance of the sheep industry over all the other primary industries of Australia, and appealed to the committee to unite with him in making a strenuous effort to have future shows more in keeping with the intrinsic value of the industry, which has done so much for the prosperity and advancement of the Commonwealth.

To achieve this he strongly advocated the formation of committees of members, who are directly interested in the different breeds of sheep and the success of the show. Their duties to consist chiefly in canvassing for show entries. A separate committee to be formed for each class of Merinos, and for Lincolns, Romney Marsh, English Leicesters, Border Leicesters, Corriedales, &c. He was of opinion each committee would naturally endeavour to advance the reputation of the breed it represented, and would certainly try to popularise it by having as many exhibits in that class as possible.

The Jackal Plague in South Africa.

The jackal is to the grazier in many parts of South Africa what the dingo is to our sheepmen in Western New South Wales and Queensland and northern South Australia, and a few notes as to the systems adopted for the former's destruction in the Cape Province may prove of interest and value to the dog-worried landholders in this country.

Under the Cape Provincial Ordinance, the province is divided into circles, each with its own organisation of affiliated hunting clubs or poison clubs, as the case may be, and each circle sends delegates to an annual congress for the purpose of reporting progress and devising further ways and means for pursuing the campaign against the arch enemy of the sheep farmer—the jackal—and other carnivora that do mischief among the flocks in a minor degree.

The bonus system is in vogue, and how it works is indicated in a report of the last jackal congress held in the terms of the Cape Provincial Ordinance. As the rewards for vermin destroyed are paid out of Provincial funds, it is a compulsory condition of the Ordinance that all circles whose units have received payments for "proofs" should be represented at the annual congresses to give an account, and render a report. The administrator who opened the proceedings of the last meeting was, however, reluctantly compelled to draw attention to the fact that a goodly number of these circles have been very remiss in their duties in this regard, having rendered neither report nor excuse for their remissness. The result of this neglect was to show a very marked discrepancy between the figures rendered of vermin destroyed and vermin for which rewards had been paid, the latter being very much in excess of the former.

On the whole, however, the year's campaign against the common enemy was a fairly successful one as regards the numbers destroyed. The best results would appear to have been secured by the hunting clubs, the wariness of the jackal rendering the operation of poisoning clubs very un-

certain. In this connection an interesting statement has been elicited to the effect that it is next to impossible to destroy a female jackal by poison. This is said to be due to the fact that the mother jackal possesses the power of vomiting her food at will, and uses this faculty for the purposes of providing for her young. That is to say, when she makes a kill on her food hunting expeditions she gorges all she possibly can, using this method of carrying the food supply to her family in place of dragging it or carrying it in her mouth.

On arriving at her lair she disgorges the half-digested contents of the stomach for the benefit of the little ones. Having this power it follows, so it is asserted—and a writer in "The Farmers' Weekly" brings chapter and verse to prove it—that the female, if her suspicions are overcome as far as to lead to the swallowing of poisoned bait, promptly discharges the whole lot at the first sign of disturbance within her anatomy. The authority quoted declares he has poisoned hundreds of male jackals, but never a female, not even when he forced poisoned food down the throat of a tame female jackal that he had in his possession.

However, whatever may be the respective merits of the two forms of jackal destruction the sheep farming community in the infested districts are arriving at the conclusion that they are face to face with a pretty hopeless problem. Local efforts may be successful, but there are adjoining areas which it is impossible to clear out, and these serve as breeding grounds for keeping up a never-ending supply of jackals. Exactly the same difficulty obtains with the dingo in this country. There is a constant supply coming down into Western New South Wales through Queensland from the unmolested breeding grounds on the South Australian side of the Queensland border.

The whole of the sheep-farming community in the Cape is arriving at the conviction that the only remedy lies in jackal-proof fencing, and a strong agitation is now afoot for securing legislative amendment to the general Fencing Act so as to extend the compulsory and contributory principles of that Act to the erection of the much more expensive kind of fencing required for keeping out the jackal. The greatest obstacle is the expense, something considerably over a £100 a mile, and very few farmers are in a position to embark upon the big commitments that this style of fencing involves, though they think it can be done if Government will come to their aid by importing and selling the materials at wholesale prices, and allowing the repayments to be spread over a long term of years. There is probably big business in store for any manufacturer or contractor who could undertake to put up the class of fence required at a price that will not break the farmer.

Wireless Communication.

Camooweal-Powell's Creek.

The decision of the Commonwealth Government to instal wireless stations at Camooweal, N.Q., and Powell's Creek, N.T., shows that wireless communication is now being recognised, if somewhat tardily, as the best means of communication across country. After all, it seems the most logical conclusion to come to, since this invention is not troubled in its application by natural obstacles, such as rivers, mountains, forests, &c., such as oppose ordinary wire telephone systems. Electrical energy is simply transmitted through space between the two communicating stations, and delay in service is impossible, for the reason that there are no poles or wires to get out of order. The medium for the transmission of wireless, namely, space, or ether, as the scientists call it, is always available, and is simply made use of.

Reverting to the Camooweal wireless scheme, there appears a likelihood of the early establishment of a network of wireless stations in this district, covering a radius of several hundred miles from both Camooweal and Powell's Creek. One or two property owners in those districts already realise the many facilities which will then be open to them. The fact that they are about to be offered the advantage of daily

contact with the commercial and shipping world is quite sufficient to make them pause and figure out how they can reap the benefit of those facilities. No two individual requirements, perhaps, will be exactly alike in detail, but efficient communication must inevitably result in the same way, namely, increased dividends made by keeping in touch with the financial centres, and the ability to take immediate advantage of any favourable change in prices.

The inquiries reaching us as a result of our last article on this subject show that this point of view is generally accepted. Many of our correspondents are now negotiating for the purpose of securing wireless telephone or telegraph installations, and it seems more than likely that wireless masts will soon be as essential to station equipment as the oil engine is to-day.

In the event of the Camooweal-Powell's Creek wireless service proving a success, it is a certainty that the Government will take steps to extend this scheme. The residents of that first area to be given a wireless service will therefore be expected by their distant friends, desiring the same facilities, to support the scheme enthusiastically, and to do everything possible to make it a permanent and ever-growing network of wireless inter-communication. They can co-operate, for instance, on a plan somewhat similar to the party-line telephone. To make our meaning clear we take for example the system adopted by ships at sea when unable to get in direct communication with the land stations. They call up a ship that is already in communication with land, and relay the messages through that ship, which retransmits them to the land station. It is a common occurrence for the messages to be relayed through two or more ships, so it seems quite feasible for this system to be applied on land as well as at sea. Those who would not be disposed to purchase a long range installation can arrange to send their messages, that is to relay them, through neighbouring stations. As for the wireless equipment, this could be bought by the owners individually or paid for from a common fund subscribed to by those interested. The subscribers in this case would, of course, contribute to the total sum in accordance with the advantage derived by each personally from such an organisation.

From inquiries made recently we are inclined to think the latter scheme would be preferable, as the installing engineers could then equip the complete system with standard apparatus at the one time, and so save the extra expense to individuals of the alternative scheme whereby a separate trip from Sydney is made for each purchaser.

Rabbit Extermination and Federal Income Tax.

Discussing the question of the departmental classification of expenditure on the total destruction of rabbits on a pastoral holding as "capital" expenditure, and consequently not a deduction from gross income for taxation purposes, Dr. Norman Kater, who is interested in properties in the Molong and Warren districts of New South Wales, pronounced it as quite wrong, and regarding the matter from an income tax standpoint we think he was quite right.

It seems to us that digging out burrows and ploughing up warrens should not be regarded as an improvement for the purposes of the Income Tax Acts, and it is quite clear that such operations are the only effective method of absolutely clearing the country of rabbits, in conjunction with the destruction of fallen timber, chock and log fences and other harbour. It is clear, too, that the principle of the Act that the expenditure must have been incurred in the production of the income before it can be a legitimate deduction is not violated by this contention, for if the whole of the taxpayers spent all their taxable income for one year in getting rid of the pest once for all the Commonwealth might lose income tax revenue for one year, but it would greatly benefit in future years by increased income and reduced expenditure.

We consider this argument should be quite good for the inclusion of netting fences as deductible expenditure. If

ere were no rabbits, netting would be unnecessary, as for ordinary purposes of sheep farming ordinary wire fences are quite sufficient; therefore the addition of netting to the fences should not be classed as an improvement, but as part of the necessary means of dealing with the rabbit pest and maintaining and increasing the revenue from the sheep.

It is to be hoped that the report of the Royal Commission on the question of the incidence of taxation will deal with the question of deductions from income tax, both Federal and State, as there are other kindred items, such as ring-barking, suckering, destruction of seedlings and noxious weeds, which add to the income producing capacity of a property, and which are classified by the Commissioner as improvements, but which are really more correctly maintenance.

This question is one which is open to argument owing to the different aspects from which it may be viewed. As we have said, we are writing from an income tax standpoint, and the principle of the Acts seems to be that any expenditure incurred in the production of income is deductible from the gross income—but any expenditure which represents capital in another form cannot be deducted. It is quite clear that a property which has been cleared of rabbits by digging out and kept clear, or which has been run and kept clean from suckers and seedlings and noxious weeds of all kinds, would be more valuable from a purchaser's point of view than one which had been neglected and was overrun with rabbits or seedlings. Therefore it might be argued that the expenditure on these objects is capital expenditure and not deductible from income. But it is not so long since there were no rabbits, and we hold that clearing the rabbits off a run which has become infested only maintains the country in its originally clean state, and should therefore be classed more as a maintenance than an improvement.

The same argument applies more evidently to seedling and suckering. The original expenditure in clearing and ringbarking is a capital expenditure and an improvement, but knocking down suckers and clearing off seedlings is a maintenance. Another case may be cited which will perhaps make our contention clearer. If on a property watered by tanks and dams, such tanks and dams were early silted up, a buyer would not give as much as he would if all the tanks and dams were cleaned out and full of water and not mud, but the cost of keeping such works cleaned out is a maintenance and not an improvement.

Reverting again to the original question of rabbit extermination, the following consideration may be of use in arriving at a satisfactory conclusion. A rabbit-proof fence is generally accepted without argument as an "improvement," and such can be taken up and its constituent parts (posts, wire and netting) sold, but the cost of digging out warrens and ploughing up warrens and the destruction of labour cannot be reconverted into cash in that way. Of course this might be said of ringbarking or tanks or wells, but in these instances there is something tangible to show the expenditure, whereas clearing out rabbits is simply getting rid of a foreign pest and restoring the property to its original state. Therefore we contend that Dr. Kater is right in maintaining that "digging out" should be regarded as a legitimate deduction from the gross income of pastoral concern in arriving at the taxable income.

The True Story of Rosenthal Station, Queensland.

Mr. Harry Bracker, the recognised authority on old-time pastoral matters in Queensland, corrects some of the particulars given by our correspondent re Rosenthal in the article on Rockland in our last issue. He says:—

"The pioneer squatter, Patrick Leslie, struck the Condamine River at what was subsequently known as Toolburra, and after inspecting the country further up he was so impressed with what he saw that he applied for all the country watered by that river and its tributaries up to the range separating the eastern and western waters from the point where he first struck the river. This vast tract of splendid country he partitioned off by the different sheds into the runs thereafter known as follows:—

"Toolburra, sold to a Scotch friend named Mr. Fairholme. Glengallan, sold to Messrs. Campbell Bros. Gladfield, to my grandfather, Neil Ross—this was a very small one. Canning Downs was reserved for himself and brothers. Maryvale, I was told, the Leslies gave to their stockman, Harry Alphen, as a reward for having discovered the gap in the range, which was made the outlet to the port, and which was missed by the explorer, Cunningham, when he tried to find an outlet from the coast. Later Maryvale became the property of that fine man, Arnold.

"Rosenthal was sold to the Aberdeen Company, the shareholders of which were mostly Scottish widows. The name was subsequently after some years altered to the North British A. Co. The general manager was Captain Mayne, succeeded by Mr. Beattie. The writer's father became the first manager, and formed the station in 1842, giving it the name of Rosenthal, signifying 'Valley of Roses,' and it was there I was born in July 1844.

"It may interest some of your young readers to learn that it was there the first wheat and maize were grown on the Darling Downs, and by him. My father had the privilege of running his own sheep there, brought by him from Bando, on Liverpool Plains, which he managed for a time after quitting the service of Mr. J. B. Bettington at Brindley Park, near Cassilis. That gentleman had kindly sold him some of the progeny of the 200 Saxon Merino sheep, which he came out in charge of, and which were landed in Sydney in January 1829. I believe these sheep were bred by Prince Esterhazy in Silesia. This breeder owned, it was stated, 162,000 sheep at the time of the Paris Exhibition in 1856.

"When my father gave up the management of Rosenthal to form Warroo, near Texas, with his own sheep he was succeeded in the management by Mr. John Deuchar, and when this gentleman became partner with Mr. Marshall in Glengallan, he was succeeded by Mr. Buckland, after whom came Mr. L. E. Lester. Later came that excellent man, Mr. Augustus Evans, as told in your history of Rosenthal, which also included Sandy Creek, which junctions lower down than the one first called Bracker's Creek, then Deuchar's, and now known as Rosenthal Creek. This junctions with the Condamine at Warwick, and the other creek nine miles lower and above Toolburra. Rosenthal was a grand fine wool growing property, but unfortunately in later years it was managed by a board of directors in London. It was there that some of the mules were broken in which were taken by Doctor Leichhardt on that expedition from which he never returned.

"P.S.—I had nearly forgotten to mention that my father grew the first lucerne at Warroo about 1851, although one or two took the credit of having first introduced it to Darling Downs in the sixties."

On the Great Australian Bight.

Mundrabilla Station, W.A.

We publish in this issue some interesting photos sent us by Mr. P. Watson, of Mundrabilla Station, near Eucla, on the border between South and Western Australia. The tank shown in the course of sinking is to be 8000 yards, 15 ft. in depth. Mr. Watson states this is the deepest sinking he could get, the bottom in every case being granite. "Tank sinking here," he says, "is no light matter. Water has to be carted 13 miles to this one for the use of horses, and shortly I will be getting chaff for them from Perth by boat, as the feed is getting short owing mainly to the rabbits, which increased enormously last season.

"The country here is healthy for stock, but light carrying, about 15 acres being required per head of sheep, and 150 acres per head for cattle. A lot of country is held by speculators (along the Transcontinental line) who have never seen it. This is the plain or desert country. I have to cross 40 miles of it when going to the line for my mail. It will never carry enough stock to pay for watering it and keeping the dingoes down, and there is no timber. It would be a good thing for me if there were some people living in this vicinity, but no one could make a living north of the edge of the timber, which is about 40 miles from the railway southward. I am also enclosing a photo of the old homestead, which was built about 50 years ago by Kennedy Bros. and McGill."

Letters to the Editor.

Sheep's Health and the Blowfly.

To the Editor.

Sir,—In your January issue I have read a letter headed "Sheep's Health and Blowfly," written by Mr. S. L. Reid. I will give Mr. Reid his due in what he says re sheep's health on rich pastures, &c., and I must also agree with him that an unhealthy sheep is more attractive to the fly than a healthy one. He says that on examination the sheep with a normal temperature, 102 degrees, were not affected by the fly. Well, to my mind this is quite likely to be right, but can he prove that the temperature of a fly-blown sheep was not normal when first struck? We all know that any animal or being, when suffering from a severe attack of blood poisoning (as in the case of a badly blown sheep) will have an abnormal temperature. I think it is a very hard matter to prove that only the sheep with a high temperature is the one that the fly will strike. My reason for doubting that a temperature is necessary for the fly to strike is because when the blowfly is active it will strike anything; for instance, a saddlecloth or a blanket.

Mr. Reid says the maggots are not responsible for the death of sheep, but the fever, brought about by disease. I know of cases of freshly-marked lambs, when they have been struck by the fly, the maggots will work right up along the bone in the remainder of the tail. If these maggots are left there to do their work the lamb will die, but if treated and all maggots killed and removed the lamb will live. This looks very much to me as if the maggot will kill a sheep, especially ewes, if not directly, at any rate indirectly, by causing blood poisoning.

I have jettied a great number of ewes, and certainly find this system a great success, as I have found it will give immunity for nearly three months, which period will see the ewes over lambing, or, in any case, over the worst of the fly attack, as the fly only comes in waves, does its work for a while, and disappears. We do not have to thank some change in the nature of the feed for a good result after jetting. I have jettied ewes, put them back into the same paddocks on exactly the same feed they came off, and still have had excellent results.

No doubt a very seriously blown sheep, if dipped in a strong mixture and let go with the rest will probably die. But with the jetting system very few losses occur if carried out in the correct manner. Mr. Reid seems to think that the more seriously blown sheep will die after being treated, and then, when the flock is inspected next day, the owner thinks he has fewer blown sheep as a result of the treatment, and yet, in Mr. Reid's mind, it is only because the worst affected have died and cannot be seen in the mob. Well, to prove that the jetting system is good and not dangerous as far as mortality is concerned, I'll quote my experience. When the fly was very active last June and July I jettied 12,000 young ewes, about 40 per cent. of which were more or less struck by the fly. Out of the whole number treated 20 may have died. I put them in small paddocks and watched them carefully to make sure of the mortality. Two months afterwards, when these sheep went through the shed at shearing, there may have been four or five lightly struck in the whole lot. The fly was still very active, blowing wethers which had not been treated.

Now I would like readers not to be misled and think there is a big mortality amongst the treated sheep, thus accounting for the appearance of a less number of blown sheep. This is not the case, I have proved the value of jetting system myself, and the results have been excellent.

I am, Sir, &c.,

B. LINTON.

'Mount Abundance,' Roma, Q., 20th January, 1921.

Salt and the Blowfly.

To the Editor.

Sir,—Re an interesting letter in your January number on the above, I feel convinced it applies to a great degree here. It prevents, through bringing about better digestion, the blowfly attack. Where salt was not kept up to the

sheep the fly was at work immediately this good year, other years not so pronounced.

Blindness in Sheep.

I know of nothing to touch having a few bells in a flock to hasten a cure. The sheep is always with the belled one, and goes to water and feeds peaceably. The worst cases soon get well.

Fat Lambs.

Mr. Mathews' handling of the fat lamb tests is most interesting and instructive. I have many copies of such tests as published by you, but Mr. Mathews' statement that only the Shortwool British ram can produce the ideal fat lamb is quite wrong. Among numbers of farmers using our Ideal and Carrsdale rams we have evidence of weights and early maturity equal to any other breed. Just a few days ago a Mallee client, unsolicited, said the lambs by Ideals went 45 lbs. to 50 lbs. dressed, 13 weeks old to 3 months. What could beat that?

The experience of most lamb raisers in the Wimmera is that the Shrop. and Southdown are not the thing, except in rare cases, as they must have the best conditions and all go as lambs. These conditions don't always present themselves, and the lamb that has good wool is wanted.—I am, Sir, &c.,

HERBERT H. WETTENHALL.

Carr's Plains, via Stawell, Vic., 2nd February, 1921.

The Wild Dog Pest.

Inoculation with Disease.

To the Editor.

Sir,—Would you let me trespass on your valuable space to give scope to an idea I have of trying to rid each State of that costly pest, the dingo.

My idea is:—If the germs of different diseases both in man and animal can be obtained and cultivated in laboratories and then, through inoculation, be passed on to whatever creature it is meant for, giving it in a mild form each respective sickness, why not adapt the principle to the dingo?

We have in Australia many places where one can send for cultivated virus to inoculate cattle for their various diseases. Why not, then, get those same men to cultivate the germs of that deadliest of all dog diseases—distemper? Then where the dogs are thickest in each State trap as many as possible and infect them with the distemper germs, in a concentrated and virulent form, afterwards letting them go back and mix with the other dogs. I have noticed, on a station, where distemper starts amongst the domestic dogs that it is very hard to prevent it going through the whole of them; therefore I think that where it could be started in each district at least 75 per cent. would die, for when a wild dog becomes ill from that complaint it would soon be too weak to hunt for itself, and would ultimately die of starvation and sickness, unlike the station dog, which would be fed on whatever his owner thought appealed to him most. No doubt 25 per cent. would live, perhaps less, but think of the impetus people would get in their attempts to eradicate the dingo if 75 per cent. were killed off.

There is no doubt this sickness has ceased for a few years to decimate the wild dog, hence their rapid increase even in places where no dog has ever been seen before. I know there are a great many people who will say: "Oh, think of the other poor animals that would be affected!" Then, my answer is this:—Firstly, why, if for years this has been solely a dog disease, should it now go out of its sphere to affect other animals? Secondly, in the experiments of Dr. Danysz at Broughton Island, on rabbit septicaemia in a very virulent form, nothing else could become infected but the rabbits, although Dr. Danysz tried in every way to satisfy himself. Septicaemia seems to be an "influenza" in rabbits, the same as distemper seems to be an "influenza" in dogs. In this case there are no rabbiters to be considered, as in Dr. Danysz's case. There are other people who will advance the argument that their favourite "Jacko" may become ill, but by care and placing a little cotton wool soaked in Sanders' Extract of Eucalypti in the nose part of a wire netting type of dog muzzle, and putting it up the

for 30 minutes each day, also giving some in oil, the
ter has cured a pup of distemper.

Supposing "Jacko" *should* die, what is he to the thous-
s of pounds spent annually in trying to combat the
go?

For instance, the December issue of The Review
states: "At a large meeting of landowners held at Wil-
mia in November, reference was made to a promise of the
Government of New South Wales to spend £50,000 in
erecting dog fences." Then again I know of a station in
Central Queensland that the owners are dog netting at a
in the vicinity of twenty thousand pounds.

have not lost twenty-five sheep here from dingoes in the
six years through being out of their field, but I think
t every landholder, should he have an idea which he may
nk would help in the destruction of dingoes, apart from
costly fencing, should voice his opinion so that a remedy
y eventually be found, thus enabling valuable sheep
ntry that owners have been forced to stock with cattle,
again be used for sheep, and also to enable owners to
hhaps spend the pounds wasted in dingoes in some pro-
tective line, thus benefiting in a small degree every one en-
ed in the industry.—I am, Sir, &c..

C. F. RICH.

lver Hills, Richmond, Q., 25th January, 1921.

Wild Dogs and Rabbits.

To the Editor.

ir,—In your December issue Mr. Jim Parker, of Menindie,
W., writing about wild dogs and rabbits, says:—"Where-
f claim that it is impracticable to destroy rabbits in the
tern division of N.S.W. by any means yet devised, for
nomic and other reasons, and even if it were practicable it
ld not be the means of ridding the country of the dogs
he way you suggest."

o put the matter plainly, with all due respect to his
ion, he is writing about a subject he does not understand.
is practicable to exterminate the rabbits in the western
division of New South Wales, and at a small cost and with-
any drawbacks by the very simple plan of killing only
females. It can be done in the dry parts in the hot
ther by tank trapping and letting the males go alive.
only that, but it is almost a certainty that when the
bits are exterminated the wild dogs will not be a pest.
o first main step to the reduction, and finally, the exter-
mination of wild dogs, foxes, and the blowfly, is the exter-
mination of the rabbit, and the first main step to the ex-
mination of the rabbit is to recognise the fact that the
ing of the males increases the numbers.

When Mr. Parker and others grasp this fact and follow it,
rabbits will be exterminated, and without the aid of
ndary netting fencing, and at a minimum cost, and with-
any drawbacks.—I am, Sir, &c.,

WM. RODIER.

elbourne, 19th January, 1921.

To the Editor.

r,—I have replied to Mr. Jim Parker's letter of 19th Novem-
in detail to the chairman of the newly-formed Western Dis-
t Progress Association. There are, however, one or two
ats I can answer now:—

Mr. Parker says "I claim that it is impracticable to destroy
rabbits in the western district of N.S.W. by any means yet
ised." This proves that your correspondent knows nothing
ut the question. It is quite easy to clear the western district
rabbits, more difficult of wild dogs, and still more difficult of
vily, but all are to be done, just as we conquered these pests
New Zealand between the years 1886 to 1900.

Mr. Parker draws comparison between the area of my old
River run and some of your western sheep stations. Area
nothing to do with the question when the right methods are
d. Australia is not as big as North Africa, yet there are no
bit or wild dog pests there. Mr. Parker overlooks the fact
t there were 80,000 acres of Crown bush at the back of my
00 acres cleared of the wild dog.

Mr. Parker quotes the difference in the average rainfall, and
maxima and minima summer and winter heat. Again these
ogs have nothing to do with the questions at issue. The wide
ert lands of Asia and Africa are not troubled with the three
ts, although dogs and rabbits have been in them since the
n of history.

4. Mr. Parker says "I don't know whether rabbits infest Asia,
America, or Africa, but if they were conquered in those coun-
tries," he asks "was it by your method of rabbit eradication, Mr.
Phillips," I reply "Yes, it was, Mr. Parker, exactly the same
method." I only followed in New Zealand what nature used
there. Wild dog and blowfly pests, Mr. Parker, come entirely
from the rabbit pest. The three stand together, and you have
to conquer "Bunny" before you can get the other two down.

Mr. Parker thinks it is our rainfall and temperate climate that
has given us the advantage. Nothing of the kind. It was the
adoption of common sense measures of rabbit clearance that
have so well succeeded. True, New Zealanders now take to the
poisoning and trapping again, led thereto by the politicians twenty
years ago, who did not want to see the export trade in rabbits
stopped. Naturally the rabbit is showing up again in places, but
that has nothing to do with me. The whole Liberal Party here
favoured for years the rabbit exporting business, and I was
powerless against them. What could I do against Sir Joseph
Ward, our chief rabbit exporter?

It is quite open for any of you to follow my methods, as I have
always frankly told you what I have done, but none of you would
believe it. Only I don't think you could use the natural enemies
or diseases (many of which you already have in Australia) with
the speed and effect that I can. Practically I may say nature
uses the diseases as her chief method of rabbit clearance; never
the rabbit netting or poison, which has cost you hundreds of
millions of money quite uselessly.—I am, Sir, &c.,

COLEMAN PHILLIPS.

Carterton, Wellington, N.Z., 1st January, 1921.

Arsenical Preparation for Footrot.

To the Editor.

Sir,—Your article, in the December issue of your valued
journal, on footrot, its troubles and cause, interested my-
self and several other farmers in this district, where we are
continually troubled with the pesty disease. Whilst we all
agreed that the treatment recommended in the article was
beneficial, our experience has been that bluestone is not a
real cure. The only thoroughly effective cure we have
found is an arsenical preparation manufactured and sold in
N.Z., which, in addition to arsenic solution, I believe con-
tains carbolic and other things. I have used this stuff for
the past few years and have found it certain in its effects,
only the very worst cases requiring to be run through the
footrot trough a second time, three days after the first im-
mersion. But the footrot trough needs to be a sufficient
length to allow the sheep's feet to thoroughly soften in the
solution, one minute's immersion being required.

This stuff is cheap and economical to use, two gallons of
it being sufficient to keep our 3000 sheep clear of the dis-
ease during the year, it being mixed at a strength 100 to 1.
There is another very big advantage with this stuff, and
that is that a lot of paring work is saved. I recently ex-
perimented in this direction with a mob of 200 odd sheep
which we had allowed to get very bad indeed; in fact, a
goodly number of them could hardly walk. We put them
through without paring at all, twice on the one day and
then again twice through on the third day. At the end of
the week they were nearly all free of limp, and now every
one of them is quite sound again.—I am, Sir, &c.,

H. J. T. HUME.

Manawatu, N.Z., 26th January, 1921.

[In the experience of many sheepmen in Australia, blue-
stone has been found an effective cure, but we will be glad
to supply to anyone interested the name of the arsenical
specific advocated by Mr. Hume.—Ed. "P.R."]

The Strike Evil on the Land.

To the Editor.

Sir,—Your leading article in issue dated 15th January,
1921, "The Strike Evil on the Land," calls for special kudos
from myself as an agriculturist and pastoralist, and I fully
coincide with its substance and appreciate its worth.

I will make one to further the object sought for, and
suggest that every grazier pay on every bale of Merino
wool produced yearly 1s. 6d., and on every bale of cross-
bred yearly 1s., also agriculturists on every bag of wheat,
oats and barley produced yearly pay 1d. per bag; the

above to be the yearly donation to the fund from each and every one associated with pastoral and agricultural pursuits.

My reason in making it per bale and per bag is that the smaller producer gives according to production. This suggestion of mine should bring in easily up to £200,000 or anything up to that yearly, and the quicker something is done in this matter the better for all concerned, not only for themselves, but Australia.—I am, Sir, &c.,

M. DOMASCHENZ.

Drung Drung E., Horsham, Vic., 1st February, 1921.

Determination of Colour in Shorthorns.

To the Editor.

Sir,—I would much appreciate it if some of your Shorthorn readers would give their experiences through your columns on the degree of certainty with which they have found it possible to predetermine the colour of calves by the mating of parents of certain colours. Possibly some of them have kept records.—I am, Sir, &c.,

BREEDER.

Hawkes Bay, N.Z., 2nd January, 1921.

Prof. James Wilson, of Ireland, who has made a study of this question, gives the result of his investigations in the following concise form:—

1. Red crossed by red should give red calves.
2. White crossed by white should give white calves.
3. Red crossed by white should give roans.
4. Roans inbred should give reds, whites and roans in the proportions 1, 1, 2.
5. Roans crossed by reds should give roans and reds in equal proportion.
6. Roans crossed by whites should give roans and whites in equal proportion.

His tabulations on actual results were as follows:—

Four hundred and thirty-eight reds crossed by reds gave 413 reds and 25 roans.

Three whites crossed by whites gave three whites.

Seventy-one reds crossed by white gave three reds and sixty-eight roans.

Five hundred and fourteen roans crossed by roans gave 152 reds, 278 roans, and 84 whites.

Four hundred and fifty-six roans crossed by reds gave 226 reds and 230 roans.

Twenty-three roans crossed by whites gave fourteen roans and nine whites.

Professor Wilson is convinced that if the Shorthorn breeder wishes to avoid whites, he is limited to three crosses—red with red, red with roan, and red with white. Whites are obtained when whites are bred together, when whites are bred with roans, or when roans are bred together.

Private v. State Railways.

To the Editor.

Sir,—I have read with pleasure the articles that have appeared from time to time on the above subject in your valuable paper, and I must congratulate your able writer on the ability displayed in dealing with such an important question. I am fully convinced that we have made a wrong start. Had the great railway question been left in the hands of private companies, the country would, even right out into the interior, have been opened by railways; we would have had a much larger population, which would have been on a far sounder basis than the present population in the rural districts, for the simple reason that there would have been sufficient lines to meet the requirements of a flood or drought with rapid transit of stock and fodder, and everything carried out in a businesslike manner.

Australia is addicted to periodical droughts of a very severe nature, and floods just as serious, and railways will practically swing the pendulum of rural industry. We must have an extensive railway system to enable us to place Australia on a prosperous basis. There is no necessity for expensive lines. The farmers and pastoralists are not asking for that. They will be quite satisfied with light lines to open up the country.

The railway debt of Australia, with interest added, is a great burden, and if our lines were disposed of to private

companies that great burden of debt and interest would be lifted from the shoulders of the long-suffering taxpayer. Australia is the grandest country in the world, but governed in a most reckless manner, without any consideration to the primary producers, who have been treated by the various Governments as nonentities. Every great pastoral district should have direct railway communication with more than one coastal port. We require the trunk lines duplicated, and many feeder lines to place stockowners on a safer basis. I am an advocate of private ownership of railways, but if we are to continue under State ownership, the commissioners should include one capable pastoralist of lengthy experience in the pastoral industry, and well acquainted with the interior.

I wish it to be clearly understood that I am not making a personal reference to any present commissioners; but as a matter of proper representation, if we are to continue the State controlled railway system, a competent man, well acquainted with the pastoral and agricultural industry, should be appointed as a commissioner to attend to the interests of the hard struggling men on the land, and to act as a pleader on their behalf.—I am, Sir, &c.,

WM. SMITH.

Currabubula, N.S.W., 20th January, 1921.

Centralisation and Stagnation.

"Ex-Digger" writes to "A.W.P." re his article in our December issue, in which he referred to the stagnation of parts of Queensland:—"I trust you will pardon me writing to you, but your article attracted my attention, and I thought you might be interested in what would be a solution of the great problem of northern Queensland, and, incidentally, of many other outlying parts of Australia.

"You quote Townsville, and speak of the decadence, or stagnation of things in those parts, and you stress the need for a coloured population to carry on the more strenuous work. In my opinion the cause of the stagnation is not the need for coloured population, it is the remoteness of these parts from the centre of Government.

"Townsville is, as you are well aware, roughly 700 miles from Brisbane, and the present state of the Commonwealth to-day proves that the further a place is away from the seat of Government the more it is neglected.

"You speak of what it would have been under American ownership. I have had the pleasure of visiting that great country—America—and also Queensland, and I agree with you, but did you consider the reason for American success in almost the whole of her ventures? It was the bringing of the centres of control into close touch, and the decentralising of all works and the local control of same. The whole country (an area slightly less than Australia) is divided into no less than over 40 States, the result being that no parts are as remote from their State centre of Government as some parts of Australia are, and in consequence no great neglect occurs.

"I venture to say that if Queensland was divided into three States—South, Central and Northern—that the central and northern portions' rate of progress would be as rapid as that of the southern portion when it secured its freedom from New South Wales. The same state of affairs exists all over Australia, and in consequence the country is developing at a snail's pace.

"At the present time in northern New South Wales there is a strong and growing movement to obtain local control, and to establish a new Northern State over an area of about 60,000 square miles, an area which American experience has proved to be the more easily managed and successfully developed, and yet we find the very papers which are continually speaking of this country's future as "full of golden opportunities," &c., are trying to kill these and like movements by sarcastic leading articles in some cases, and simply ignoring and refraining from giving any reference to the movement in others.

"That the above arguments are sound is borne out by the position of the State of Victoria—it is, with the exception of Tasmania, the smallest Australian State, and, therefore, the most easily managed. In consequence, its government is less costly, and its taxation correspondingly lower than its larger neighbours, and at the same time its population on a square mile basis is considerably higher."

Motor Notes.

By "GNOME"

During the last couple of months we have had quite a few rounds in connection with "knocking," and though at times they may have been of interest, a breather at this juncture may not come amiss.

Sydney Motor Show.

Towards the end of last month that phrase, "Have you seen our Harbour?" received a very bad jolt in the form of a new phrase, which was coined in Sydney during the "Petrol Festival," and which was something after the following, "Have you seen our Motor Show? If not, then why not?" And if you had chanced to be in Sydney during that carnival, you really had not seen Sydney if you failed to see the show. It was without doubt one of the finest things I have seen of its kind in this country. On the opening night, the 21st of January, whilst wandering through the main hall, a well-known breeder of sheep and myself came face to face for the first time during quite a lengthy period. The first remark he made was: "By jove, isn't this fine. Every bit as good as anything you will find over the other side," and he is a man who does not waste time in idle words.

It really was a magnificent show, and the Motor Traders' Association are to be congratulated upon the really remarkable display.

One excellent idea adopted was the issuing of a pamphlet showing the ground plan of the floor, with all the stands numbered, and on the opposite page was the name of the agent, with the number of his corresponding stand. This could be improved upon by giving the name of the car opposite the number, as very few country folk know the name of the agent who handles the particular make in which they are interested.

Now skimming over a few impressions that were gained when making casual inspection, we will take the multi-cylindred cars first. It was my intention upon first entering the building to adhere to a programme which simply laid down the one rule, "start with the big fellows and finish with the light small 'uns," and this I did, though it was very difficult to carry out, as one met so many fellows who only had time for their own particular pet. That was just what I wanted to avoid, in case prejudice might creep in and spoil the whole "circus."

My attack was opened on the Cadillac and the Cole Aero 8, and two such fine examples of the 8-cylinder engine probably could not be found in any other chassis throughout the world. In the Cadillac we have undoubtedly the sturdiest car running to-day in Australia. You have only to take a run down the south coast or along the north for that matter, and there you will find the Cadillac frequently loaded with as many as 11 passengers and half a ton of luggage, and treated as "railway trains." No other word can be given for it. And when it comes to a matter of attention, then the one expression, "Murder," just about fits it. Quite recently one of these cars came to my notice after it had run 70,000 miles without even having had the valves ground in, and 70,000 miles over atrocious roads, and mountainous too, means a great deal of excessive heating.

The Sixes were the next to attract attention, and of all the interesting exhibits at the show, this type of car stood out on its own, though I do not suggest for a minute that if I could only afford one car it would be a Six. The first to attract the eye was the Minerva, and for all round cleanliness and robustness this machine just about took the "bacon." One only had to look at it to see that it was a thoroughbred. And glancing over her lines one feels no hesitation in surmising that this chassis will perform every bit as well as the pre-war model, though one doubts if the European car will ever again attain the popularity of the earlier days.

Strolling across to the Rolls-Royce stand after this inspection, to me it appeared as if the Rolls people were

trying too much, as the machine gives one the impression that to keep it in first class fettle a really first class driver-mechanic is most essential, and in these times of high wages (though none have come my way yet!) and the high cost of upkeep, a great deal of the gingerbread is gone before you start out. Sunbeams showed a very fine six, of which the more one saw the more one liked it. It was also interesting to see a Wolseley Six on the stand of Dalgety and Co. This machine is full of the characteristics of the British workman, but after all the past colonial experience that this firm must have had under colonial conditions, I can't understand why they under-sling the worm drive.

No Six-cylinder show would be complete without mention being made of the American fry, who all more or less predominate in this class so far as our own conditions go. Amongst those seen at the show were the superb Hudson and the ubiquitous Buick, both of which have made good out here.

Turning to the Fours. Of course here again America predominates, as the price more or less plays into their hands. But amongst the higher priced Yankee article there is no doubt that one gets wonderful value for his money. Take the Essex for instance! It is hard to recall the name of any car that has made such a meteoric leap into popularity as this machine, and there is no doubt that it has not all been done in the hot house or on paper. The car has won its way to public favour through sheer merit, and has undoubtedly come to stay. Touching upon the European proposition, perhaps the palm leaf goes to a motor of French extraction. In the days just prior to the war, competition in the motor trade in Europe was becoming very keen, and a glance over the Rochet-Schneider fully convinced one that the French manufacturer is still a big factor to be reckoned with in the field of design and competition. That 20-30 h.p. Rochet-Schneider, with its ball-bearing cantilever springing, and its beautifully finished "aeroplane" dash, is a perfect dream. And I'll bet you she is brim full of punch too.

Crossing over the "ditch" to "Ole England," we are at once confronted by a really goodly selection of cars, many of which have been strangers since the outbreak of war, and seeing them once more in their peaceful war paint, if such a thing is possible, is not only good to the eye, but also brings back many very happy recollections of the early pioneering days that have been left many years behind.

The first of these to attract me was the little Humber, of 15 h.p., and as I stood there gazing at this 'bus one almost became hysterical as one's thoughts flew back to those early days of the Humberette. About 1916 the Humber began to boom, and standing there on that huge floor at the recent show, a chap found himself fighting his battles all over again with defective batteries, dry cells, and commutators! But not so with this new model, in fact it is doubtful where finish in detail is concerned if there is a more brainy job in the whole circus.

Another car that looked exceedingly attractive was the Crossley. No matter at what angle you look at the complete car it gives you the impression of being a most robust type of vehicle for our conditions, but whether this is so or not remains to be proved. We saw a great deal of this machine when with the R.F.C., and though the light tender had all the attributes that are necessary for rough and tumble conditions, it is doubtful if the touring car can be placed in the same category. However, time will tell.

Another very fine chassis that was on show was the Vauxhall, which has a war record worthy of a British subject, besides holding records for reliability and speed. In fact it is probably one of the fastest machines that is produced in England to-day. Only quite recently a surprising pace was registered on a short stretch of good, level road, when a touring model with complete body, wind screen, mudguards, &c., all up, and carrying a full cargo of passengers, attained the surprisingly good speed of 87 miles per hour. When one takes into consideration that the bore and stroke are only 98 mms., it will be seen that this is a rattling good performance.

Touching on the smaller American fry, one saw such familiar makes as the Dodge, Hupmobile, Chevrolet, Maxwell, and

the nearest form to perpetual motion, the Ford. In all probability the finest finished complete car at the show was a Dodge Sedan, listed at something like £1000. Can you recall the type of European car you could purchase for that modest sum before the war?

No resume of a motor show would be complete without mention being made of the light car section. There were two cars that particularly took my fancy, one being the little French production, the Citroen, and the other hailing from the "Ole Dart" under the name of the Bean.

As a light car the former probably stood on its own, and the more one saw of it the more he liked it. It is a really tidy little 'bus, and there are some very interesting points that should gratify the most fastidious of tastes.

In the little Bean we have a typical British product, and an example of what the British designer and his colleague the workman really can do when the mass production problem is tackled as it should be. At the last Olympia show this chassis caused no end of a sensation, as it has been designed more for the owner-driver with an eye to simplicity and strength, which makes the car capable of a very wide range of service, with low maintenance costs. The agents have informed me that on give and take roads the engine is capable of giving off 30 miles to the gallon as an average, which on our roads is not too bad. There is one little feature that has been adopted, and one that surprises me has not been used on higher priced cars, and that is, the fitting of air vents to the back axle and the gear box. I have often thought that the cause of a lot of oil and grease floating round the externals has been caused by the air pressure that is set up in such a confined space as these members permit.

One feature that is to be found in this machine as well as in the little Citroen is the straight line principle of the transmission and engine, the dog of the starting handle being in line with the centre "pop" on the bevel pinion of the tail shaft.

Well, should you be in Sydney during the next motor show, make a point of attending it, as the experience gained from this effort should materially assist in making the next show the finest in the Southern Hemisphere. Cheerioh.

Areas in the Northern Territory for Pastoral Lease.

Opening Date May 14th, 1921.

Mr. H. M. Trower, Commissioner for Crown Lands, Northern Territory, and chairman of the Classification Board, has completed arrangements to open three large areas of pastoral land in the Territory to pastoral lease. The total of the three areas is 44,182 square miles.

The largest comprises 28,758 square miles of "Class 2 and 3" country, situated east of the Overland Telegraph line, between Tennant's Creek and Barrow's Creek, and extending irregularly eastward to Alroy Downs, Alexandria, Avon Downs, and Lake Nash leases. The leases vary in size from 163 to 612 square miles, and a sample of a second-class lease is given as "generally well-grassed open forest, some good timber, fair water." A third class is described as follows:—"Low sand ridges, spinifex, with patches of grass, no water." Probably sub-artesian water would be obtainable over much of the country at a shallow depth.

An area of 11,384 square miles, in 24 leases, varying in size from 200 to 810 square miles, is to be offered easterly and south-easterly of Borroloola township. This country, which will include coastal areas, is west of Wollagorang, and north-east of Anthony's Lagoon. A further block to be opened for lease is one of 4040 square miles, ten leases, east of Newcastle Waters, and handy to the overland route from Anthony's Lagoon to the Overland Telegraph Line.

Application for the leases can only be made in Melbourne or Darwin, though as the eastern portion of the Territory has largely been developed of late years by Queensland money, one would have thought the areas could have been applied for at Brisbane, Townsville, or Cloncurry.

Literary Supplement.

Sporting Notes.

BY "FIFE AND DRUM."

We raced through several years of war against a foreign foe, and would never have grumbled for one moment if, in the interests of the community, our sport had been banned by the ruling powers, but at this moment, with the country, and most of the world, supposed to be at peace, our pleasures, in Victoria at any rate, are interdicted, our liberties curtailed, and nobody quite seems to understand the reason why, though it is said that the stewards on board ship wish to have their hours of work distributed in some manner different to what is the custom to-day. Therefore these evil times have gat hold on us, and we are not living normal lives.

The Yearlings.

However, such times will not last for ever, and meanwhile breeders are preparing their young horses for the sales, both in Melbourne and in Sydney, and the army of yearlings is as great, or greater than ever. Prices in the Old Country are at as high a level as ever, and the aggregate sum which was received from the sale of blood stock at the December sales at Newmarket was a record. This is very extraordinary. It is cheering, moreover, to our breeders, for we will most likely see the same state of affairs in Melbourne at the coming sale by Messrs. Yuille, and there are more entries this year than I ever remember. With Mr. L. K. S. Mackinnon disposing of his entire stud up at Chatsworth Park on the twenty-fourth of this month, and with Mr. Norman Falkiner taking the Wednesday of race week all to his own cheek, one imagined that the catalogue on the usual Monday would be a meagre one. But not a bit of it. Last year there were 129 lots, including Mr. Mackinnon's and Mr. Falkiner's. On this occasion there are 121 without their long strings. They will all find buyers.

It is a very sad pity that Mr. Mackinnon has decided to disperse his stud altogether. He has collected a very beautiful group of thoroughbred mares, a considerable number of which are of the bluest of the blue imported blood. Woorak, his stallion, has already, in his first season, proved that he can sire winners, and that his stock are very good looking and sound. The farm is in full working order, with beautiful fencing, first class buildings, and appurtenances of all sorts, the plantations are growing visibly, the feed is excellent, and yet all the beautiful castles in the air are knocked over with a wave of the hand, and a great deal of pleasure has gone out of many racing men's lives.

I can only hope that some enthusiast will purchase the place as it stands to-day, and will continue breeding the thoroughbred on this spot so perfect for the purpose. What I dread is that a dairy farm may spring up on the sacred ground, and that, in the course of a year or two, its whole aspect will have changed, and that this fine pasture land will never more vibrate to the thunder of the flying feet, nor the air quiver to the shrill neighing of the foals answering their mothers in the early spring mornings. On the contrary, the air will, in future, most likely be thick with the lowing of the herds, the yards and places where they milk will exhale that cowy smell which we all know, and which is so different from the aroma in the air left by the nimble footed mob. It would be very sad, exceedingly depressing, but is more than probable.

I have paid a couple of visits to Chatsworth during the last few weeks, and have also been round the other breeding establishments in the Goulburn Valley. The season has been a very wonderful one, and feed, in those favoured lands, is simply beyond belief. It is certainly far beyond anything in my own experience. We are now at the beginning of

February, when one expects that all the grass is naturally as dry as any chip. But as I walked through the paddocks at Chatsworth, lingering amongst the mobs of mares and foals, their feet continually trod upon the richest of green grasses and herbs.

Kangaroo grass, not in those thick, coarse tufts, which are either slightly nor nutritious, but short, close, green and succulent, was in evidence everywhere, and the mares, and the foals at their sides, were participating in the overflow of nature, and were all in perfect health and splendid condition.

There ought to be some bidding on the twenty-fourth, provided that trains can be supplied to carry buyers to and from. The sale has already been postponed from 6th January on account of the inability of the Railway Commissioners to carry the prospective passengers. I do not intend to go through the entire catalogue with you, but I should like to draw your attention to several of the lots which I consider to be extra choice. Of course there is Woorak himself. We need not discuss him, for everyone knows all about his breeding and performances. But I can tell you that he is a picture of health, that he is splendidly certain with his mares, and that his stock are as sound in wind, limb, and constitution as the get of any horse in the world. Then the mares. Mantine, a young imported mare, six years old, with a chestnut Woorak filly at foot, and served by him again. She is by the St. Frusquin horse St. Amant, a Derby winner, from a dam, by the Bend Or horse Orvieto, out of New Zealand, by Isonomy. Amantine has a very fine yearling, one of the picks of the basket.

Belle Sauvage, by Bobadil, out of Queen of Scots, is seven years old, and has a black filly at foot, and is served by Allack. Her yearling by Woorak is a splendid filly, and as fast galloping as anything you could see anywhere. Clarissa, dam of Clan Fingon, Woorissa, and Visibility, a nine-year-old, by Cicero, from the St. Frusquin mare Orle. She has a bay Lanius filly at foot, and is in foal to Woorak.

The Lanius foal is worth far more than her present weight in gold, the combination of blood being a very perfect one.

Heedless, eleven years, is dry this year, but you look at her degree, and see what you think she is worth. She is a St. Frusquin, and her dam is the famous Float, by Sheen out of Footlight, by Cremorne out of Paraffin. Did you ever read anything like that? I shall expect to see this mare run far to the four figures. Then Heels over Head is her daughter, four-year-old, by Spearmint. She is served by Woorak, and the progeny of this union cannot fly, then good bye to Heels for ever and a day.

Here is another maiden mare that might well be a huge success. Lady Karanaud, four years, by Tressady from Karanaud, by Sir Tristram out of Carronade, by Grand Anceur from Crossfire, by Goldsbrough out of Powder, served by Woorak. Her ladyship could gallop, too. Lady Antoi is another imported mare, six years old, with a chestnut filly at foot, and served by Woorak. This mare has a very galloping-like Buckwheat yearling, a capital specimen of her horse's get, and one of the most contented and quiet of the you ever saw. He is as lazy as they are made—a good qualification in blood horses. Mernda is only thirteen months foaling, and she throws grand stock. King of the Sea is a good horse, and he is out of her. Hers is a great tribe Malvolio's family—and she is served by Woorak, but was away this foaling. Her yearling, in spite of somewhat peculiar looks, is a very fine colt, but he met with an accident to his hind shank, and a nasty lump left there is a disfigurement. I am certain that this can be removed by efficient use of a sharp knife, and I would like to own him. He is awfully like galloping.

Miss Langton, a Bobadil mare out of Phyl, a mare of Trenn and of Yardley descent, is one of my favourites. She is a twelve-year-old, and is already the dam of a winner to Woorak—Canowindra. This Yardley family is most valuable. Perdita, the dam of Strathredole, has a clipping yearling to Woorak. I rather think he is the most promising of all the yearlings at Chatsworth. He has size, length, power, soundness, and it will be a great surprise if he is not a very fast horse. Perdita has a chestnut colt at foot, and is covered

again. Polaecca, another Bobadil mare, eight years, has one of the best of yearlings, but was dry this year, and is now served by Woorak. The more I look at her yearling the better I like him, and the mare herself does come from such a great family. She is out of Taffrail, by Positano out of Heloise, by Wallace out of Emmie. It is the No. 5, and it is most awfully good.

Quintanona, a lovely bred daughter of St. Frusquin and Mrs. Quickly, by Queen's Birthday, a Hagioscope horse, has lost her foal this year, but is served by Woorak again. And here is, perhaps, the highest bred of all the mares, Radesia. She is only a six-year-old, and is by Radium, sire of Rebus and King Offa, both of whom did so well in Australia, and out of Silesia, by Spearmint from Galicia, dam of Bayardo and Lemberg. Really one need not dilate upon the excellence of Galicia. She was the greatest mare of modern times, and the arch upholder of the beautiful Queen Mary family. Radesia has a bay filly at foot by Woorak, and there is a brown yearling, also by Woorak, with the euphonious name of Linton Lawrie—you know the old song, don't you?—and the mare is served by Wallace Isinglass. I cannot tell you what this mare, in foal, and with foal at foot, is worth. But I am certain that, if the right sorts are at the ringside, she may well "tip the beam" at a couple of thousand, at least. Fierce is the light that beats upon a throne. I have heard folks, who have mysteriously wagged their heads at mention of this mare's name, whisper the words, "wind-sucker." Well, I can say this: She is in first-class condition, healthy, thriving, contented, her coat lying the right way, and her foal doing well at her side. I have watched her in the paddock for an hour or two, off and on, and I have never yet seen her display one single symptom of that trouble. I mention the subject because I know how people love to talk, and I am telling you the results of my own observations. Rumour, as usual, lies most foully in her throat.

Other mares there are, nearly, if not quite, as well bred as those we have looked over here to-day, and some people might even prefer them. But I have given you what I think the pick of the bunch, and you will be there to choose for yourselves. I should just like to mention one or two of the yearlings before we pass on to other things. There is Radesia's brown. He is very typical of the Queen Mary family, not a big one, and standing a little over on his knees. He may be awfully good. Tipple's chestnut is peculiarly like Traquair, Woorak's sire. This is a safe winner, and might be a phenomenon for speed. Vinalia's daughter is a trifle small, and has a splint on the near fore, which, however, is quickly disappearing. She will be invaluable at the stud. Tao's colt looks like speed personified. He has a slightly enlarged navel, but otherwise is as right as rain. Sal's chestnut colt has lovely shoulders, and walks well. Naska has a brown Sungauge filly, and she is like a galloper. So, too, is the little chestnut by Sungauge from Francette. Bob Kennedy, the stud-groom, tells me she can lick creation in the paddock.

The brown colt out of Heedless is a good specimen, and may well be the greatest winner of them all. Kennedy has a distinct predilection for him, and, indeed, his appearance is most prepossessing. Clarissa's bay is growing quickly at present, and promises to be a good deal bigger than Clan Fingon, and more robust than Woorissa. And there, I think we have been over the lot, and one feels very sad when saying good bye to the stud and its surroundings for the last time. It had been a blistering hot day upon which we made our last inspection, but there were signs of a change. After dinner, in the darkness, with no moon, but with Venus holding her lamp in a clear, cloudless space high in the west, we sat on the verandah, waiting for the breeze. Far away over the river flats we could hear its whisperings amongst the trees. The whispers grew to a murmur, the murmur to a roar, and against the dim sky we could see the tree tops waving wildly and bending to a wild blast from the south. It was very blessed after the sweltering heat, and with bodies cooled by the wind, and eyes bathed in the darkness, sleep required no courting. But it was a long farewell to the Chatsworth Stud.

Yet there were many farms to visit before we reached home again. Round the corner, as it were, is The Nook, and it is well named, nestling, as it does, in the river bends, comfortable and homelike. Mr. A. T. Creswick keeps his stud here, with White Star and All Black as the lords of the harem. You may recollect when the former landed from England how one was a little disappointed with him. He looked a bit small and pony like. I do not think you would recognise him to-day. He is now quite a big, lengthy, manly horse, and oh! such a lovely colour. All Black was always a man, every inch a king, and he is as well as ever. There are eleven young ones coming down to be sold, all blue blooded, but my favourite is the brown filly from Lutetia, sister to Karnatten and The Parisian. She is a gem of the first water. Then there is a grand bay daughter of Incendi, by White Star. Incendi is half-sister to the dam of Artilleryman, and we have something good here. There is a sister to Ceridwen, from the chestnut Wallace mare, the sister to Kingsburgh. You will like this filly.



THE LATE MR. ALEC MURPHY AND SIR SAMUEL HORDERN.

Indeed there is a sweet collection at The Nook, and if you do not fall in love with the little brown filly by White Star from Eleanor, you are not the horse lover I took you for. And don't forget the chestnut Kenilworth, out of the sister to The Fortune Hunter. She is good, either as matron or maid.

From The Nook we dashed off, away down the Goulburn to other studs, through Nagambie, with its beautiful sheet of water, an unknown quantity when I won a race there, when "Polly and I were sweethearts, forty years ago," or thereabouts. Our road leads us along many irrigation channels, through the Murchisons, with the river flowing very dark beneath its high, timber clad banks, over many more freely-flowing canals, and so at last to Toolambah, Mr. S. A. Rawdon's farm.

The handsome Lanus is king here, with Broadsword as his understudy, but until next year the Llangibby horse will not be represented at the sales, for his eldest born are but foals still. Mr. Rawdon sends down nine this year, the best, to my mind, being the chestnut colt by Broadsword from Lady San, and a bay filly by the same sire out of Vivacious. The stock are much better grown than they used to be when reared on the light, sandy country round Mentone.

Mr. J. V. Smith's was our next place of call, and here they keep no sire. I like that way the best. The yearlings are by Andria, Comedy King, Buckwheat, and All Black. There are eleven, all told, and their condition is excellent. The Buckwheat colt is from the Wallace mare, a sister to Sheriff Muir, and he is as certain to gallop as you are to eat your breakfast. Rosanna has a brown colt to Comedy King, which, if on the small side, is a safe winner, and he is the chestnut Oaks winner's first foal. I like first foals. Then there is a shipping fine brown filly by All Black from Lady Champion, by Challenger out of Bang. This mare will

"make a spoon or spoil a horn." I should like to linger over each member of the team, but time and space forbid. I must mention more particularly, however, the brown filly by Comedy King out of Star of India, by Wallace, the bay colt by Comedy King from Rosanna's sister, and last, but perhaps the best of all, the bay filly by All Black out of Sainte Devote, by Wallace from the great Cruciform. This filly is peculiarly like that great mare Desert Gold, and I expect a keen fight over her in the ring.

The Star of India filly is the particular fancy out of the whole string of Percy Kennedy, who looks after them all. "Percy's fancy," they call her. Those tips are sometimes useful to buyers.

Our last call of the day was at Noorilim, Mr. Norman Falkiner's splendid farm. I should have liked to have devoted an entire article to the glories of this casket and the jewels that it contains, for it is well worth it. I would just wish you to understand, however, that I can safely say, and without the slightest exaggeration, that I have never seen a better lot of yearlings sheltered under one roof, nor better "done." Of course the bulk of them are by Comedy King, and you may say that this is his first real and great chance. The old horse I may say, in passing, is looking extremely fresh and well, and his mate, Spearhead, is now a picture. The latter is getting good looking stock, the best, perhaps, of which is the beautiful shouldered, racing-like and lengthy colt from Sumurun, by Bobadil. I took a fancy to this chap, and Spearhead may be made by him. There is a bay brother to Surveyor next door, a fine colt, not reminiscent of his great brother, being much better looking. I marked him "A1."

That well bred mare Regality has a good colt to Comedy King, and one that may well beat records for abnormal speed is the brown colt out of Nicotelea, by Roi Herode from Nicola, a half-sister, if you please, to The Tetrarch. Another that at once strikes you as being a flyer is the grey from Sweet Innocence, by Roi Herode. This colt lingers in my memory. Buy him, if you want a certain winner. A chestnut filly by Sea Prince out of Booran's sister struck me as the most substantial Sea Prince I had ever seen. Lengthy, deep ribbed, good legged. Have a look at her. I have noted the bay filly by Shepherd King out of Lady Victoria by St. Frusquin out of a sister to Polymelus as "very fine indeed." She ought to be, too, with that pedigree.



ARTILLERYMAN.

Owned by the late Mr. Alec Murphy and Sir Samuel Hordern.

The bay filly by Comedy King out of Red Streak has love straight hocks, and I think very highly indeed of the hal sister to Artilleryman by All Black. She is a quiet, length unassuming sort, what swells are made of. And now here my first choice of all the lengthy, high class string—the brown filly by Comedy King from Palena, by Radium out Pieria, by St. Frusquin. I had to go back for one more lo

in and again. It was the same with the bay filly out of reuse, half-sister to Alan Breck, by Bayardo. This mare a magnificent fore end, and yet is high behind at the time. She may be anything, and I have marked her fine." The pet of Terry, the most efficient stud groom, is a black filly by Comedy King out of Ellen Graeme by Tarley. She is very beautiful, peculiarly "smart" looking, I noted her as "absolutely the most certain winner of lot." But we must hold our hands. Time advances, I must just add my note to Uncle Sam's Dame Quickly, with her roan flanks and legs. "I love her." Well, we have missed a lot out of the twenty-four, and we may be left out the best, but I strongly advise you to go and peep for yourselves.

Before closing my notes, I must sound a sad one. Poor Alec Murphy passed away last week, just before Arteryman, the great horse which he owned in partnership with Sir Samuel Hordern, handed in his checks. I used the word "poor," advisedly. Mr. Murphy had had a good life. I think he had enjoyed life, and his last years had been spent in a halo of glory illuminated by his wonderful work. But his last few months had brought him, I am afraid, a terrible amount of suffering, and one could not help feeling sad when the news came that he had passed away. He was a fine old sportsman, and one whom we will miss for many a long day.

The Farm of To-day.

We've bathed the bullock's tootsies, we've cleaned the rooster's ears; we've trimmed the turkey's wattles with antiseptic shears, with talcum all the guinea hens are beautiful and bright, and Dobbin's wreath of gleaming teeth we've burnished snowy white.

With pungent sachet powder we've glorified the dog, and when we have the leisure we'll manicure the hog! We've done all in our power to have a barn de luxe, we've dipped the sheep in eau de rose; we've sterilised the ducks.

The little chicks are daily fed on sanitated worms, the calves and colts are always boiled to keep them from the germs, and thoroughly to carry out our prophylactic plan next week we think we shall begin to wash the hired man.

—"London Live Stock Journal."

A Co-operative Sheep Dip.

The following particulars of a co-operative dip, built by members of the Riverton, South Australia, branch of the Agricultural Bureau, shows what may be done with a little capital and good management:—

The dip was financed by floating shares at £1 each, the minimum subscription being £1 and the maximum £5. Approval was obtained for the erection of the dip on a government water reserve without rent. The plans for construction were supplied by the Department of Agriculture, and the total cost of erection was £109 8s.

The management is vested in a committee of nine, including secretary and manager. The manager prepares the dip, assists in the dipping, and notifies owners when to bring their sheep in; and he is paid according to the time he is employed. The company supplies the dipping solution, and the owners of the sheep supply the labour, it being customary for owners to assist each other. Members are charged one penny per head, and non-members £1 for the first hundred, and 12s. 6d. for each additional hundred.

In the first year, 1917-18, as a result of dipping 6726 sheep, the credit balance at the end of the season was £3 1s.

In 1918-19 15,680 sheep were dipped, and the balance was £20. In 1919-20 14,441 sheep were dipped, and the credit balance was £60. After interest at current rates has been paid, a refund to members, on the basis of the number of sheep dipped, will materially reduce the actual cost of dipping.

Agriculture.

Australian Grain Crops.

The Season.

The weather during the past month has for the most part been fine and hot. There has been a little rain, but certainly not sufficient to seriously interfere with grain harvesting, climatic conditions for which have latterly been ideal. Practically all the wheat is now safely garnered, and, judging by all reports, the yield has turned out a good deal better than anticipated a couple of months ago. It was then estimated that the total production for the Commonwealth would be about 130,000,000 bushels. Everything now points to the aggregate being in the region of 155,000,000 bushels, which, if realised, will be the second highest ever obtained. The 1915-16 season holds the record as regards quantity, and until this year, yield per acre. Production in 1915-16 was 179,000,000 bushels, but then the grain area was 12,484,000 acres, compared with 9,100,000 for the current season. The average for the whole of Australia in 1915-16 was 14.34 bushels per acre, while this year it promises to be nearly, if not quite, 17 bushels.

The current satisfactory yield must be attributed principally to the favourable weather experienced during the growing period. As far as the Eastern States are concerned it may be said that crops hardly received a check from the day of germination until harvest time. There were moments of anxiety, but the necessary spells of rain or fine weather seemed to turn up when most needed to save the situation. Even the extraordinarily heavy rains the second half of December and early in January did not do as much damage as might reasonably have been expected. No doubt the fact that the previous harvest, owing to drought, was largely a failure contributed to the exceptional average this year. The same thing happened in 1915-16, which followed a drought. As already mentioned, the average that year was 14.34, in the season before it was only 2.58 bushels. Last year the average was 7.17 bushels. An occasional rest, prescribed by nature, is an important factor in soil productivity.

Teams are now being used for carting wheat to the railways, and, where conditions are favourable, for summer fallowing.

The New South Wales Government Statistician in January issued an estimate of the wheat yield for his State. He puts the total down at 55,302,000 bushels, which is 15,000,000 bushels in excess of the generally accepted pre-harvest estimate. The area reaped for grain is given as 3,107,500 acres, and the average reaches the high figure of 17.8 bushels. The highest average yield, 21.4 bushels per acre, was obtained in the northern portion of the western slopes; the yield in the central portion was 18 bushels, and in the southern 17.2. The yield in the central plain was 18.5 bushels per acre, and in Riverina 16.5 bushels. It is gratifying to note that the number of growers, which had been decreasing for six years, increased during the current season to 17,502, from 16,266 in the preceding year. The area cut for wheaten hay is estimated at 521,500 acres, and the yield 871,000 tons, or 1.7 tons per acre. Considering the depleted fodder stocks, it comes as rather a surprise to hear that such a relatively small area was cut for hay.

At the time of writing rain would be welcomed over the coastal districts of the southern States. Summer fodder crops and maize have become parched by the high temperatures and need refreshing.

The belief in the efficacy of pools as a panacea for marketing ills has apparently obtained a strong hold over producers in some of the States. Little less than a month ago delegates from the maize-growing centres of Queensland met in Brisbane and decided to form a voluntary maize pool. It has been arranged that the council of the Queens-

land Farmers' Union shall draw up the conditions, &c., and make arrangements for storage, distribution and finance. To date particulars have not been published. The Victorian Farmers' Union has convened a conference of producers and officials of farmers' co-operative organisations, to be held at Ballarat on the 10th inst. to consider the advisability of forming oat, barley, onion and potato pools. Unless a pool is made compulsory it is difficult to see how it can be made effective, and it is pretty certain no Government will lend itself to compulsion at the present time.

It is announced that experiments in the electrical treatment of wheat seed are to be carried out at the Werribee, Vic., research farm this year. The English patent electrochemical process is to be tested. The results will be watched with more than passing interest.

The Pools.

Returns issued by the Australian Wheat Board show that up to 31st January 62,561,000 bushels of 1920-21 wheat had been pooled, of which 22,150,000 bushels were received in Victoria, 19,031,000 in New South Wales, 18,361,000 in South Australia, and 3,019,000 in the West. Already considerable shipments overseas have been made, the total for the month being 9,062,000 bushels. The wheat is going to Great Britain, many European countries, including Germany, Egypt, and the Canary Islands. Assuming that the harvest yields 155,000,000 bushels, the exportable surplus, after allowing for a fair carry over, will be 100,000,000 bushels. How much has actually been sold is not being published officially. About three weeks ago the "Chicago Trade Review" came out with a report that France had bought 36,000,000 bushels, and Egypt 12,000,000 bushels, thus accounting for 48,000,000 bushels. Further, it stated that England had agreed to take 50 per cent. of the exportable surplus, or in other words, 50,000,000 bushels. These reports are not taken seriously in trade circles, although it is believed that a fair proportion of the crop has been sold. The manager of the Wheat Board, Mr. H. A. Pitt, when asked, refused to comment on the matter, apparently holding that it is unwise and unnecessary to enlighten competitors as to the correctness or otherwise of the figures.

With regard to the pools previous to the current season, the Wheat Board's table of statistics shows that there were still supposed to be 6,500,000 bushels of "old" wheat on hand at the end of January. Three-quarters of it belongs to the 1916-17 pool, and was recorded as being in South Australia. The bank balances on account of all pools stood at £19,000 debit on date mentioned.

The question of whether wheat certificates issued against deliveries into the 1920-21 pool are to be made negotiable has not been decided. It is understood that the matter will come up for final decision at the February meeting of the Board. There seems to be a feeling against allowing gambling in the scrip such as has taken place in the past.

The New South Wales Government is continuing negotiations with the banks and Federal authorities with the object of raising the money necessary to pay the extra 2s. 6d. per bushel guaranteed growers in that State. The Minister for Agriculture, Mr. Dunn, says the money is going to be paid all right, but he cannot state exactly when. In the meantime it is disquieting to hear that the mismanagement which characterised the control of the wheat a few years back bids fair to be perpetrated again. Inspectors of the State Wheat Board are said to be sending in reports to the effect that agents are neglecting to take proper steps to protect the grain received by them. Many of the receiving agents appear to be gambling on the weather, having done little or nothing to protect stacks in the country. A rain storm would probably do incalculable harm if it came before roofs are put over the wheat. The State Board has notified the agents in default that unless immediate steps are taken to put affairs in order, the board will assume control of the receiving stations concerned.

The Wheat Compensation Board, appointed by the Holman Government to assess the amount of "national loss" in the 1916-17 and 1917-18 New South Wales pools, due to the mismanagement and neglect by Government officials, has completed its labours. A report has been presented to the Government, and it is believed the board finds the amount to be about £500,000, the greater part being debited to the

1916-17 pool. However, it does not necessarily follow that growers, or holders of the scrip concerned, will receive all or any of the money. Parliament has the final say, and until Parliament meets months hence, the matter will be hung up. Another matter which the New South Wales Government will have to fix up shortly is the adjustment of overpayments to scrip holders in the 1916-17 pool, which amount to some £400,000. This was made from the funds of other pools, and must be replaced before the accounts of those can be squared up.

Following the example of Queensland the Tasmanian Government has formed an independent pool for the current wheat crop grown in its State. All wheat, except such as is saved for seed purposes, comes under the scheme. The price is fixed at 9s. per bushel, payment for which will be made during 1921 in three instalments of 2s. 6d., 2s. 6d., and 4s., the last having deducted from it the expenses of marketing, freight, &c. An advisory board to control the scheme, comprising three farmers and two millers, has been appointed.

An agreement has just been entered into between the Victorian Wheat Commission and flour millers for the manufacture of 3500 tons of flour, 80 per cent. extraction, on behalf of the Egyptian Government. As delivery has to be made within the next fortnight, the bulk of the order will be executed by metropolitan mills.

Bulk Handling.

A deputation, representing the W.A. Grain Growers' Co-op. Elevators Limited, waited on the Premier last month to ask for the immediate issue of the lease of sites at Fremantle and country sidings for elevators, also a definite declaration as to the Government's intentions in respect to financing the proposals, conversion of railway rolling stock for bulk handling, and the re-introduction of the necessary legislation.

In reply, Mr. Mitchell said the Government would arrange to lease the company the sites, but he advised them to do nothing in respect to building silos until assured of a monopoly. Of the two Grain Elevator Bills that were shelved by the Legislative Council, the one that aimed at giving the company the monopoly would be brought before Parliament again. He was not sure, he said, what the position was in regard to the second bill. The Commissioner for Railways had already agreed to provide the facilities necessary for the conversion of rolling stock to make it suitable for handling wheat in bulk. He would take the opinion of the Crown Solicitor as to the validity of the proposal to assist in financing the scheme through the wheat dividends.

Mr. J. MacCallum Smith, in introducing the deputation, explained that 240,000 out of the stipulated 300,000 shares had been subscribed and paid up to 10s., and the farmers were now most anxious to make a start towards putting the scheme into operation. In order to ensure that the remaining 60,000 shares should be taken up it was necessary for them to be in a position to tell the farmers that they were on safe ground.

Freight.

The freight market continues to decline. A month ago the steamer rate for wheat loadings to Great Britain was 80s., but on 6th February, according to a London cable, it had dropped to 67s. 6d. a ton, with 5s. reduction for Western Australian loading. Some day, perhaps, we shall know how much of the wheat is being shipped at the present cheap rate, and how much at £6 and £7 per ton, the figure that ruled when negotiations were first opened for the transport of the harvest. The anxiety of ship-owners to secure a share in what freight is offering points to a large proportion having been already booked up, but in the absence of official information from the Australian Wheat Board that is only conjecture. The difference between 67s. 6d. and 140s. per ton is equal approximately to 2s. per bushel of wheat.

Markets.

Cables indicate that the price of wheat in England and the United States is steadily weakening. Early in January the control price issued by the British Food Controller stood at 100s. 6d. a quarter c.f.f. for Australian, from which figure it has dropped by stages of 4s., 10s. and 5s., and is now 87s. 6d. in bulk, and 88s. 6d. in bags. At 87s. 6d. per quarter the selling rate is something under 11s. a bushel. Assuming that the freight is 1s. 10d. (on the basis of 67s. 6d. per ton), and charges at least 3d., the f.o.b. price in Australia would be about 8s. 9d. a

bushel, but it must not be overlooked that owing to early commitments the freight paid will probably be a good deal more than 1s. 10d. a bushel. According to private advices Chicago futures are quoted at 6s. 6½d. per bushel. Allowing for freight, exchange and other charges, the landed cost in Great Britain on this basis would be about 10s. per bushel.

As a result of urgent representation the charge for grain supplied to Australian millers for gristing into flour for export to South Africa, the East and Pacific Islands, has been reduced to 9s. a bushel. For wheat to be converted into flour for local consumption the price is fixed by the Australian Wheat Board at 9s. per bushel.

Fodder.

Oats have firmed, and maize weakened during the past month on both Sydney and Melbourne markets. An adjustment in the price of flour and mill offals in Victoria has led to an increase of 45s. per ton for bran and pollard in that State. Chaff, with the arrival of new supplies, is weaker all round. The following are current quotations for wholesale lots of fair average quality:—

Melbourne.—Bran and pollard, millowners' price, £10 per 2000 lbs., market rates about £2 per ton higher; oats, milling, 2s. 6d., feed, 2s. 4d. to 2s. 4½d. per bushel; maize, 5s. a bushel; chaff, to £4 15s. per ton; hay, chaffing sheaves, £2 10s. to £3 per ton.

Sydney.—Bran, £9, and pollard, £10 per ton; oats, Algerian, milling 3s. 3d., feed to 3s. per bushel; maize, yellow 6s., white 5s. 6d. to 5s. 9d. per bushel; lucerne hay, Hunter River, £4 5s. per ton.

Adelaide.—Bran and pollard, £10 5s. per ton; oats, 2s. 3d. per bushel; chaff, £4 2s. 6d. per ton.

Bahia Grass.

The November issue of "Science and Industry" contains some notes on the above, a native of South and Central America, which bears the Latin name of *Paspalum notatum*.

Experiments with Bahia grass have been carried out at the Florida, U.S., Agricultural Experiment Station. It was first planted there in 1913, and the original plot is still growing. From the very first the grass gave promise of being valuable. On 31st March, 1915, a further plot was planted under pasture conditions at the station. The ground was ploughed, and plants taken from the original seed bed were set out in rows 24 ins. apart each way. The plot was protected from stock during the first summer, and the grass made good growth, a fine crop of seed being produced. Towards the end of September 1915 the fence was removed, and cattle have pastured on the planted area, both summer and winter, since that time. Notwithstanding the fact that it has been subjected to heavy pasturing, the grass has continued to grow, and has now formed a complete sod over the space treated. In addition, a large number of individual plants have sprung up in the adjacent area, indicating that seeds spread by cattle, winds and birds germinate readily.

From these experiments it is evident that Bahia grass will, under favourable soil and climatic conditions, form a good sod, and spread while being pastured. Further, that cattle eat it all the year round, but nothing is said about its flesh or milk-producing qualities. From the description it appears to be closely allied to *Paspalum dilatatum*, and probably the food value is about equal.

Bahia grass appears to be best adapted to a rather moist soil, not necessarily low, poorly drained land, but rather soil that holds moisture well. It has, however, been planted in light sandy land, and given fairly satisfactory results. It is not likely to be of any value when planted on dry sandy ridges. Likewise, it is not considered suitable for land that is subjected to flooding, especially where the water stands for several days. The pasture plot at the Experiment Station is on what is looked on as ordinary first-class farm soil in Florida.

The grass is rather sensitive to cold. A temperature of 34 to 26 degrees will usually cut back all the green growth. The roots, apparently, are not injured by frost, and new shoots come away again in the spring, if moisture conditions are favourable.

The United States Senate has agreed to an amendment in the Emergency Tariff Bill, which will have the effect of raising the proposed duty on wheat from 1s. 3d. to 1s. 8d. per bushel. It is considered unlikely that the bill will pass for some time, at all events.

Agricultural Notes.

The final official estimate of the United States wheat crop puts the total yield down at 789,878,000 bushels, compared with 934,265,000 bushels in 1919.

Advice was received early in February to the effect that rains in India had greatly benefited crops there, which were previously suffering from drought.

After meeting home demands, Bulgaria will have for export this season 309,000 tons of wheat, 62,000 tons of rye, 57,000 tons of barley, 508,000 tons of maize, and smaller quantities of oats, making a total of 1,030,000 tons of cereals.

Final statistics regarding Agricultural Production in New Zealand for 1919-20 season show that 142,473 acres were under wheat, as compared with 210,775 in the previous year. The oat area is given as 29,520 acres in excess of 1918-19, when 487,337 acres were under that crop.

Plans are under way for the formation of a co-operative association to control the domestic and export trade in wheat in the United States. Individual farmers and their organisations will be the shareholders, and it is hoped the scheme will be sufficiently forward to handle the 1921 crop. It is expected about 50 per cent. of the total wheat produced will come under the control in the first year.

The Lindley Walker Co-operative Wheat Company Limited has received a cable message, stating that the Argentine wheat surplus is officially estimated at 120,000,000 bushels, but in some quarters the estimated surplus is 136,000,000 bushels. Importing countries generally are refusing to pay Argentina the export taxes on wheat, and business there is stagnant, thus throwing more demands on other markets.

Preliminary agricultural returns show that 1,874,634 acres were harvested for wheat in England and Wales during 1920, as against 2,221,195 acres in 1919. The total yield was 6,677,000 quarters (7,976,000 in 1919), and the average 28.5 bushels to the acre. The area harvested for oats was 2,264,635 acres (2,563,733 in 1919), and the yield 10,760,000 quarters (11,417,000 in 1919), or 38 bushels to the acre. With barley 6,336,000 quarters were obtained off 1,637,166 acres, as compared with 5,474,000 quarters from 1,509,716 acres during the previous year.

Relative Food Values of White and Yellow Maize.

In reply to a question as to which has the greater food value, white or yellow dent maize, Dr. E. B. Hart, University of Wisconsin, U.S.A., says that ordinary analysis does not disclose that any difference exists. However, by carrying out laboratory experiments it has been discovered that white maize is deficient in fat-soluble vitamins, while yellow is comparatively rich in this nutritive factor. Vitamins, it may be explained, is essential to the growth of an animal. Tests prove that with yellow maize as a sole source of vitamins, normal growth of an animal could be secured, but with white maize no such performance is possible. Still as maize, yellow or white, is seldom fed to stock alone, this does not much matter. Probably the other food consumed at the same time will contain sufficient vitamins to make up the deficiency in white maize.

Argentine Grain Exports.

(TO BRAZIL INCLUDED.)

	Total 1918.	Total 1919.	1920. 1st Jan. to 10th Nov.
Wheat tons	2,929,419	3,258,259	5,029,528
Maize tons	647,657	2,374,721	3,517,012
Linseed tons	391,053	840,272	902,149
Oats tons	538,536	331,350	360,418

ACRES SOWN.

	1919-20.	1920-21.
Wheat	15,133,500	15,190,250
Linseed	3,563,000	3,524,625
Oats	2,327,500	2,067,500

Live Stock Matters in U.S.A.

Mr. Claude D. Maclure, the well-known stock and station agent, of Albury, N.S.W., who is making an extended trip abroad, writes interestingly of what he has seen in the United States. He says:—

"I am in Chicago to-day, and fortunately for myself, I was here in time to visit the Chicago International Live Stock Show. I was a guest of Mr. Orvis T. Henkle, general manager of the Union Stock Yards and Transit Company, under whose guidance I made a thorough inspection of the wonderful exhibits at this the greatest live stock show on earth.

"No mistake these Americans are marvellous people. My host, Mr. Henkle, is a small man, sitting in a small office in the centre of the stock yard buildings, and handling the destiny of 20,000 cattle, 20,000 sheep, and perhaps 50,000 to 60,000 hogs a day, and employing perhaps 5000 people. This company runs hotels, banks, saleyards, railways, &c., all centralised in the one building, right in the heart of the stock yards. I was introduced to and had lunch with the breeder of the first prize pen of champion two-year-old steers of this show, Mr. John McBain, general manager of the Labrador Cattle and Ranching Company, a concern which has 217,000 breeding cows, and ranches in Canada, Mexico, and Labrador.

"I saw a pen of Hereford steers which were fed for 109 days. Each beast showed a net gain in weight of 3.39 pounds per day. They have reduced this feeding business to a fine art. They sell show stock by auction, but their ordinary markets, both store and fat stock, are sold privately, and by live weight, so much per 100 pounds. This seems very strange to me after our "guessing weight." Each truck is sold as one lot. They are then put on a scale, weighed and run straight into the slaughter pens.

"I have never been treated with greater kindness or courtesy anywhere. Big general managers of firms here, ten times the size of any similar concerns in Australia, are as easy to see as some of our little department managers in our own city. Their banks all try to help me in my business, and their railways and travelling facilities are simply colossal."

Paraguay.

One of the great food producing countries of the future will be the beautiful country known as Paraguay. For generations the descendants of the Spanish have done their level best to ruin it, and have as far as possible succeeded. Revolution after revolution, and war after war have denuded the country of population, have kept it in stagnation and the natives in misery. Republics—this sort anyway—are not satisfactory.

However, a change has come. The wonderful success in converting native stock into high-class cattle through importations and judicious breeding that has occurred in Argentina and Uruguay has turned the eyes of British and American corporations to Paraguay. First of all are coming the railways, and on the trail of these the cattle experts, and as in the case of Brazil, great strides are being made in the improvement of native stock.

The International Products Company of America a few years ago acquired several million acres of land north of Asuncion, the capital, at 60 cents per acre freehold. One of these tracts comprises 1,250,000 acres, embracing grazing land and valuable Quebracho forests. The western part is used for young stock, and after three years old they are moved eastward to the Paraguay River. Opposite, on the eastern side of the river, is a tract of 60,000 acres, where they are kept and fattened on rich grasses during their fourth year, and from there taken to the slaughter houses and the carcasses shipped at Antonio, below Asuncion. About eight acres of land are required to fatten one steer. At a land cost of 60 cents per acre, the interest at 7 per cent. is slightly more than four cents a year; allowing eight acres per head, this gives 32½ cents per year, or a total of one dollar sixty cents as the interest on land, which produces a

steer ready for market in five years. Paraguay has only 1,000,000 head of cattle. They range in weight at five years from 850 to 1000 lbs., considerably lighter than the Argentine beast. Stud cattle are being introduced.

The grasses of Paraguay are abundant, and give all the year food for stock. The great asset is the magnificent Paraguay River, where deep sea vessels can be loaded along the banks for many hundreds of miles. Two 750-ton steamers are being built in the United States to load frozen meat from San Antonio for Buenos Aires at the present time.

Rio Grande do Sul, Brazil.

This extensive region, with its magnificent climate, soil and natural wealth, has for centuries been asleep, but its awakening has come. Estancieros and Brazilian capitalists have started to develop it, and already the results are amazing. The great want is railway communication, and when that comes nothing can stop the Rio Grande from being one of the most flourishing countries in the world. A huge modern dairy factory has recently been erected, and also a National Frigorifico, occupying an ideal site for the reception of cattle. Already many thousand have been slaughtered. Pigs will also be largely dealt with at these works.

One of the leading estancieros, Mr. A. A. de Assumpeao, has for many years been importing pedigree cattle from England, and the result of his enterprise is to be seen in the vastly improved native cattle.

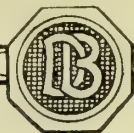
At the last census in 1916 Brazil had 30,000,000 cattle and 18,000,000 pigs. Of these, 8,000,000 cattle and 4,000,000 pigs were in the State of Rio Grande do Sul, so there is a vast source to improve and draw from.

Water Finding.

A New Phase of the Subject.

It may be remembered that in our September issue of 1920 we published an article on the Water "Divining" Problem, and stated therein that as a result of a long series of scientific experiments and investigations carried out in London by Prof. Low at the instigation and expense of Mr. Thos. Robertson, of Mt. Mitchell, Lexton, Vic., the problem had been solved. Dr. Low's report gives the nature of the indications from underground water, and we mentioned that through the courtesy of Mr. Robertson this interesting document could be seen at our office by anyone interested in the matter.

We have now received an inquiry from a subscriber in New Zealand, which shows that investigations are being made there with a view to opening up a totally different phase of the subject. The following is extracted from our correspondent's letter:—"I am very much interested in a theory that is now being pretty generally accepted by those who have given the subject consideration and thought, that diseases such as cancer and goitre are caused by the emanations from running water, under the position in which the subject who has taken these diseases has been in the habit of sleeping. . . . I lost my wife through cancer, and learning about this theory, called in a water diviner, who located a running stream of water passing right under the position in which my wife had been sleeping for over 20 years. With a view to further testing this subject, I have had a bore put down 68 ft. and struck the water strata between 50 and 60 ft. down. I have had this water tested scientifically, and find that it is strongly impregnated with radio-activity, and I incline very strongly to the belief that the radio-emanations from this running stream may have been the cause of my wife's attack of cancer. The scientific gentlemen whom I have experimenting here think that I might get some great assistance from Dr. Low's report, and I feel sure that you will agree with me that if anything can be done in the direction of tracing the cause of these diseases, cancer and goitre, and if there is anything in the theory that we are working upon, then anything we can do will be not only of interest to ourselves, but of world-wide importance."

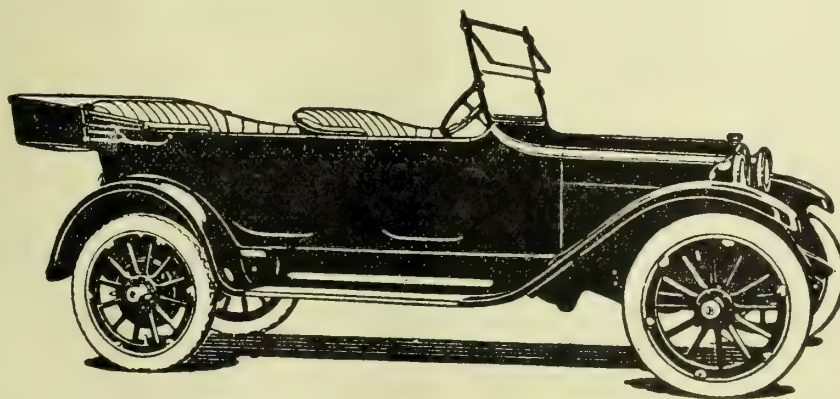


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The Wool Trade.

The Wool Trade in Australia and New Zealand.

The past month has, in the absence of sales in Australia, been an uneventful one, with, however, the usual exception, which in this case is the approval of the British Australian Wool Realisation Scheme by the Imperial Government. The Association has now been duly registered in Victoria, and the necessary machinery, which will presumably be provided by a selection from the Central Wool Committee and various State Committee staffs, will soon be in working order.

So far no indication has been given as to the policy to be pursued, but a recent cablegram points to the fact that it is proposed that a selling basis at London auctions of two bales of the carry-over to one of the current season is to be adopted; whether this extends also to Australian sales remains to be seen.

The policy of not holding sales during January on this side, does not, at the moment, appear to have been a success, as in the face of the present demand for America, it seems as if it would have been possible to have got rid of at least as much wool as will be disposed of this month, and still have sold the suitable wools passed in out of earlier catalogues. Doubtless, however, everything was done for the best, and this is no time or place for post mortems.

That New Zealand growers approve of the Association is shown by the fact that the executive of the New Zealand Farmers' Union has approved of the decision reached at the recent woolgrowers' conference, that in the event of stocks of Imperial wool being in danger of forced sale, New Zealand should accept the opportunity of becoming associated with the Australian Wool Control Committee.

The Continent.

A well-known Continental operator, quite recently returned to Australia, reports the position of affairs in France and Belgium as without precedent. Woollen manufacturers have had, and are facing, big losses to get out of stocks held, and would be content if they could only keep floating, but unless they can sell, he points out it is no use their buying at any price. The extraordinary part of the position appears to be that the whole matter has resolved itself into a struggle between consumer and retailer. The manufacturer, as pointed out, is prepared to make his loss, but not so the retailer, who, with the buying public holding off for a cheaper article, is doing very little business, but will not bring prices down until his high-priced stocks are exhausted. In a few cases the manufacturer is adopting the practice of selling direct to the public, but only a few have taken the risk, as they realise that, when the position becomes normal, retailers may boycott them.

Exchange is another clog, and the fact that there is a shortage in the Australian clip is not likely to have any effect on values whatever, so far as this season is concerned.

Altogether the position, he declares, is most obscure, and to put one's finger on the weakest point, it can be said that want of confidence is at the moment the factor which overshadows the whole position.

Crossbred Pools.

So far the crossbred pool referred to in our last has not got into any concrete form, and it is difficult to see just what real benefit it could confer.

It is generally understood that Australia's crossbred wool represents only some 8 per cent. of the world's supply; that being so it cannot have much influence on prices.

Undoubtedly, however, much good could be done by bulking the great quantity of small lots, particularly crossbreds, usually termed farmers' wools, and rendering same more readily marketable by careful grading and classing.

At the moment pools are in the air, but it should be remembered that a pool is not a panacea for all evils, nor does it create a demand, which must develop in its own way and time, and cannot be forced.

United States of America.

Much has been made recently of the statement that an embargo would be placed on the import of wool into America early in March pending the revision of the tariff as a whole. It was also announced that a steamer timed to leave southern ports on the 12th inst. for Seattle direct would be the last available boat by which wool could be sent in order to be admitted free. This, however, has not been borne out by the fact that the Emergency Tariff Bill has not been carried in the United States Senate. Introduced to anticipate the revision of the tariff, which is looked upon as a natural sequence of the return to power of the Republican party, this bill, it is stated, will be "talked to death" by the Democrats. If this be correct, it will probably be some months before the tariff will be amended, although it is stated that any duty imposed can be made retrospective, which seems a somewhat difficult position.

It is generally believed that the bill was the outcome of requests made at the end of last year by woolgrowers, farmers, and wool dealers, described in some quarters as the "unholy alliance," for an embargo on the importation of wool and sheep pending the revision of the tariff.

Accordingly, on 20th December, the Ways and Means Committee of the United States House of Representatives agreed to new protective tariff rates, which were embodied in the bill presented to Congress, including wool (greasy) 15 cents (normally 7½d.), and (scoured) 20 cents (normally 10d.) per lb. That there is much wire pulling in practice can be readily accepted, but in view of the opposition engendered by the bill, particularly with the still rising cost of living, it is quite probable that any duty imposed will not come into force much before the middle of the current year.

South African Wool.

An announcement which caused considerable surprise recently was that the British Government is paying £15 per bale for 100,000 bales of wool which it has purchased from South Africa, the price being about equal to the value ruling for the 1913-14 clip. It is stated also that the wool will be handed to the British Australian Realisation Association for sale on agency terms.

The details of the transaction under which the British Government has acquired the wool are of interest in two ways. That the proceeds of the South African sale are to be invested in railway and other manufactures by Great Britain will tend to popularise the transaction with leaders of industry in the United Kingdom, especially in view of the outcry they have raised at the hold-up of export business because of the difficulties of the exchange situation between London and the Dominions. The manufactures will be bought on account of the South African Government, which will have to provide funds for its home wool-grower through the agency of financial houses in South Africa.

London Sales.

The January series of London wool auctions closed on the 28th of that month, and included both Government and free wools. As usual, the former were offered first, but official reports quoted the competition as being unsatisfactory, only some 38 per cent. of the offerings being quitted. Private advices of the result of the free wools showed a very different position, being to the effect that 60,000 bales were submitted and practically all sold. Good competition was experienced, prices ranging from 5 per cent. to 10 per cent. higher than opening rates for Merino, super comeback 5 per cent. higher, other descriptions showing no material change.

The February series has been fixed to commence on the 22nd inst.

The following is the range of values current at close of the auctions as cabled by the Director of Raw Materials to the Central Wool Committee; the figures are of interest as providing comparison with those ruling here:—Merino, greasy, extra superior, 29d. to 35½d. per lb.; do., 21d. to 28d.; average to good, 15d. to 20d., poor condition 10d. to 14d., inferior pieces and locks 3½d. to 9d.; Merino, scoured, superior, 32d. to 48d., average 24d. to 31d., inferior 15d. to 23d., faulty pieces and locks 10d. to 14d.; crossbred, greasy, superior, 50's, 58's, 18d. to 27d.; ordinary, 50's, 58's, 13d. to 17d.; superior, 44's, 48's, 13d. to 16d.; ordinary,

44's, 48's, 9d. to 12½d.; superior, 36's, 40's, 10d. to 12d.; ordinary, 30's, 40's, 7d. to 9½d.; scoured crossbreds, superior, 48's, 58's, 22d. to 34d.; ordinary, 48's, 58's, 14d. to 21d.; superior, 46's and below, 12½d. to 16d.; ordinary, 46's and below, 7d. to 12d.

AUSTRALIAN SALES.

Sydney.

Sales opened on the 31st January with a general improvement in competition for all but the very thin, wasty and burry descriptions. A feature at the inception was the bidding on behalf of the Japanese section, which, however, was not altogether maintained as the series progressed.

American buyers took up the running on all suitable wools, and the aspect of the sales was more nearly approaching normal than at any time of the season.

Topmaking sorts met with wider demand, and in crossbreds, of which there were more offering, more sales were made, but at no quotable advance, local manufacturers lending support. Clearances generally were on better lines than before Christmas, and the prospects for medium sorts of all descriptions is certainly better than it was. On the other hand, however, the great bulk of inferior lots, caused by the adverse season, is still a drag on the market, and it is difficult to see how such is going to be liquidated, in the absence of any material Continental demand, except by patient waiting.

Leading prices were:—W/Aston 33½d., K/Corringle 35½d., J McH/Spring Gully 33½d., WSH/Meriba 30½d.

Melbourne.

With the resumption of the sales in Victoria on 1st February it was soon apparent that good orders for all wools suitable for America were available. In many cases, particularly in lots showing really fine quality, France had to be reckoned with, however, and a duel between two particular firms that carried the lots in question up by pence a pound was a very distinctive feature.

Concurrent with such came more competition from the Bradford section, which gathered in strength as the series progressed, resulting in far and away the best clearances being made during the series.

Excluding a few of the choicest Merino and comeback parcels, rates ruled quite on a par with the November series, topmaking sorts being if anything in favour of sellers. Crossbreds also shared in the demand, and while not quotably dearer, were more saleable at figures which, in the case of northern wools, ranged from 13d. for fine comebacks down to 4½d. for coarse crossbred in fleece wools.

No great weight of these grades was submitted, it being felt, doubtless, that the market had to be fed in homoeopathic doses, but the fact remains that those offered were sold, which is what everyone is wishing for.

What will happen if America falls out remains to be seen, and growers must not expect too much, but the fact remains that in limited quantity there is no such thing as absolutely unsaleable wools. But force too much of the inferior lots on the market and they cannot be absorbed. Patience must therefore be displayed, and brokers supported in their efforts to keep the sales moving steadily or disaster will result.

Leading prices were:—JR/Melrose 44d. for a line of 74 bales, F (in dia.)/Mt. Sturgeon 42½d., JC/Kobyboyn 42½d., Rockview/JW, JJ/Mount View and AW/Redwood 40d., Caupaul 38½d., and WL/Ardachy 37½d.

Western Australia.

The second series of the current season took place on the 3rd inst., some 10,000 bales being brought forward, chiefly Merino, and drawn principally from the Murchison, Midland and Great Southern districts.

Competition was on better lines than at the first series, with wider competition on topmaking sorts.

The great bulk of the best wools was taken by America, but they had to be absolutely sound or missed the demand.

A few crossbreds were brought forward which also shared in the improved demand.

Of results to hand, the Gabyon clip made up to 28½d.

Poor Tasmania had to forego the intended sales, as buyers were not prepared to take the risk of not returning to the mainland in time. Adelaide auctions are to be held to-day (11th) and Geelong next week, with Brisbane on the 15th inst.

Allocations for all centres will be made on or about the 15th inst. for the March series, and in view of current sales the figures may possibly be somewhat increased.

Analysis of Appraisements.

The Central Wool Committee has issued a highly interesting and exhaustive analysis of the various types of wool appraised during the three seasons ending 1919-20, which will be an authority for many years to come.

It shows in concrete form the various types of wool produced in each State, subject, of course, to those lots which are so situated geographically as to find their way to another State than that in which they are grown.

In this connection the percentage of crossbred and Merino appraised in each State to the total Australian production is of such interest that particulars are given below:—

	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.
Per cent. of Merino greasy and scoured to total Merino greasy and scoured appraised in Commonwealth ..	38.1	16.4	23.6	13.8	7.3	.8
Per cent. of crossbred greasy and scoured to total crossbred greasy and scoured appraised in Commonwealth ..	33.6	52.8	1.7	4.4	3.7	3.7

Carry-over Stocks.

A cable from London dated the 9th inst. quotes the Director of Raw Materials (Sir Arthur Goldfinch) as stating that stocks of wool on 31st December, representing the carry-over of Imperial purchases, were 1,815,900 bales of Australian and 768,242 bales of New Zealand. Of this quantity 1,013,133 bales of Australian wool and 375,636 bales of New Zealand wool were in the United Kingdom.

NEW ZEALAND WOOL SALES.

Christchurch.

The third sale of this season's series of New Zealand wool sales was held at Christchurch on 15th and 16th January, when 21,784 bales were offered, of which 13,437 bales were sold at auction. The bulk of the wools comprised 50's or over in quality, including a number of station half-bred and Merino clips. The Christchurch Woolbrokers' Association quote wools suitable for America at an advance of 1d. to 2d., good to medium half-bred ½d. to 1½d. lower, inferior half-bred ½d. to 1d. lower, best threequarter-bred 1d. to 2d. higher, medium and inferior par to ½d. lower; best crossbred, par to 1d. lower; best pieces were equal to the previous sale, and medium and inferior pieces ½d. to 1½d. lower.

The range of prices for super Merino was 17d. to 23½d.; medium 50's to 56's, 14d. to 16¾d.; super half-bred, 14½d. to 17½d.; medium, 10½d. to 13d.; inferior, 7¾d. to 9¾d.; super Corriedale, 14d. to 17d.; medium, 10d. to 12½d.; super Southdown, 10d. to 13d.; medium, 9½d. to 10½d.; super ¾-bred, 10½d. to 15½d.; medium, 7d. to 8d.; inferior, 5½d. to 6½d.; super crossbred, 7¾d.

QUIBELL'S Improved Powder Sheep Dip

GIVES THE BEST RESULTS.

to 11d.; medium, 5d. to 6½d.; inferior, 3½d. to 4½d.; Longwool, 6d. to 7½d.; first half-bred pieces, 10d. to 13½d.; second pieces, 8d. to 9d.; third pieces, 5d. to 7d.; locks, 2½d. to 4½d.; crutchings, 3½d. to 6d.

Invercargill.

The first wool sale of the season was held at Invercargill on 22nd January, and the bulk was cleared at auction, prices being on a par with those obtained at the recent Dunedin sale. The result is regarded as satisfactory.

Prices ranged as follows:—Superior Merino, 16d. to 18d.; superior half-bred, 13d. to 14½d.; medium half-bred, 11½d. to 13½d.; inferior half-bred, 9d. to 11½d.; 46's to 48's: superior three-quarter-bred, 10d. to 1s.; medium, three-quarter-bred, 7d. to 9d.; inferior three-quarter-bred, 6½d. to 8d.; 40's to 44's: superior crossbred, 6½d. to 11d.; inferior, 4½d. to 6d.; pieces, 9½d. to 11½d.; crossbred, 5d. to 6½d.; bellies and pieces, 2½d. to 3½d.; others—Merino, 3d. to 3½d.; crutchings, 4½d. to 5d.

New Zealand Wool Realisation.

A joint meeting of the New Zealand Board of Agriculture and the Producers' Committee was held on 14th January to discuss the present position regarding wool.

The question of whether it would be possible to utilise the British Australian Wool Realisation Association for the purposes of New Zealand carried-over wools in the event of the Imperial authorities finding it necessary to make a change in the control of its wool stocks was very fully discussed.

The meeting decided to wait upon the Prime Minister. This was accordingly done, and the situation generally was fully discussed, the Prime Minister promising to cable the Imperial authorities in London, with a view to obtaining the necessary information.

As a result of a discussion on market conditions generally, the meeting passed a resolution on the following lines:—

"That by reason of the fact that arrangements are pending which, if brought to fruition, will ensure that the market will not be demoralised by the sudden realisation of surplus stocks, and result in current clips obtaining first consideration, this conference of the Board of Agriculture and the Producers' Committee is of opinion that, as soon as these arrangements are completed and their effect generally understood, the result will be a feeling of confidence that does not now exist being restored in the wool industry. This conference thinks, therefore, that there is no need for vendors to sacrifice their wools. As, however, fairly satisfactory prices are forthcoming for finer qualities, it would appear that growers of these qualities have nothing to gain by withholding them from the market."

AUSTRALIAN WOOL EXPORTS.

From 1st July, 1920, to 31st January, 1921.
Compared with corresponding period last year.

	July 1, 1920—Jan. 31, 1921				
	Season 1919-20. Bales.	1919-20. Bales.	1920-21. Bales.	Increase. Bales.	Decrease. Bales.
New South Wales ...	703,456	349,586	262,526	—	86,960
Victoria ...	533,604	298,863	213,049	—	85,814
Queensland ...	353,964	163,123	150,122	—	13,001
South Australia ...	195,865	106,359	91,962	—	14,397
West Australia ...	160,550	56,249	46,888	—	9,361
Tasmania ...	30,247	9,721	3,605	—	6,116
	1,977,686	983,901	768,252	—	215,649
	Net Decrease, 215,649 bales.				

Considerable quantities of wool grown in some States are shipped from others, therefore the above figures do not show actual production of each State, but the total overseas shipments.

New Zealand Exports from 1st July to 31st December, 1920, 228,624 Bales. Figures for the same period 1919 were 281,026 Bales.

WOOL ARRIVALS AT SEABOARD IN AUSTRALIA.

From 1st July, 1920, to latest dates.

State.	Date.	Bales.	Bales.
New South Wales ...	28th Jan., 1921	—	506,988
Victoria ...	5th Feb., 1921	—	267,121
Queensland ...	25th Dec., 1920	—	—
Townsville ...	—	56,319	—
Rockhampton ...	—	27,697	—
Brisbane ...	—	114,661	—
		—	198,677
South Australia ...	29th Jan., 1921	—	—
Port Adelaide ...	—	109,131	—
Other ports ...	—	19,372	—
		—	128,503
West Australia ...	17th Jan., 1921	—	—
Freemantle and Albany ...	—	28,187	—
Geraldton ...	—	13,409	—
		—	41,596
			1,142,885

Wool Realisation Association.

We announced briefly in our last issue that the British Government had accepted the proposals for the formation of a Wool Realisation Association to deal with the control and sale of the carry-over wool as outlined the previous month.

The statement issued by the Ministry of Munitions in London and cabled to Australia said, inter alia:—

"On 23rd December all representatives of trade bodies interested in the subject were publicly invited through Bradford Chamber of Commerce to submit to the Ministry of Munitions their observations with regard to those aspects of the Australian scheme which might be held to affect trade and British manufacturing interests. Observations thus submitted have received careful attention, and it is satisfactory to note that after sending deputation to Minister, British Wool Federation, which is very fully representative of the raw wool interests, pledged its hearty support to the Australian scheme. Negotiations have been carried on with the Government of the Commonwealth of Australia for purpose of bringing about complete understanding as to the spirit in which transferring of stocks of wool would be handled if the proposals were accepted. These exchanges of views have proved that no danger exists of any disregard of the special interests on which stress has been laid by the various representatives of associations in this country, who have given their views on the matter. A full recognition exists of the fundamental identity of interests between the Australian producers of wool and the British users, because:—

(1) Both parties are equally interested, especially at the present time, in the largest possible consumption of Australian wool;

(2) British users have nothing to gain in the long run by price of raw wool being forced below cost of production;

(3) Australian interests equally with British interests will be seriously damaged by any attempt to exact excessive price for the raw wool by means of any trust, combine, or selling monopoly.

"The Government of the Commonwealth of Australia have undertaken on behalf of woolgrowers and of projected association that the carry-over wool shall be sold as promptly as market conditions will permit, and have declared that to do so is one of the main objects of their proposals. They have further undertaken that the operations of the association shall be conducted with due regard to the legitimate interests of the British consumer, and to maintain, and if possible to increase, existing trade between Australia and the United Kingdom in wool and wool products. In view of the above satisfactory assurances, His Majesty's Government have felt justified in accepting proposals of the Government of the Commonwealth of Australia. Arrangements are therefore proceeding to liquidate as from 1st January Australian section of wool purchase accounts, transferred to the Government of the Commonwealth of Australia for account of their woolgrowers in final settlement of the reciprocal obligations under the three wool-purchase contracts for half of the surplus assets ascertained to exist on the agreed settling day. An agency contract will be arranged between His Majesty's Government and the association for the sale at commission by the latter of the British half of the existing stocks of wool. It is expected that sheep skins and the New Zealand wool now held by the British Government will be included in agency contract."

The Directorate.

The association will be registered under the Victorian Companies Act 1915. Its capital will be £25,000,000 (subscribed capital to be determined) and its registered office will be at 113 William-street, Melbourne. The directorate will consist of:—

Sir John Michael Higgins, chairman of Australian Central Wool Committee (chairman); Sir Arthur Horne Goldfinch, Director General of Raw Materials, London; Sir John Ferguson, joint general manager Lloyd's Bank, London; James Alexander Cooper, Fellow Society Accountants, London; Francis Willey, wool merchant, England; Henry Ernest Davidson, secretary Dalgety and Co. Ltd., London; William Stevenson Fraser, managing director Young & Co. Ltd., Melbourne, vice-chairman of Australian Central Wool Committee; William Allan Gibson, general manager Goldsbrough, Mort and Co. Ltd., Melbourne; John Mackay, pastoralist, Sydney,

president Graziers' Association of New South Wales; Charles Robert Murphy, pastoralist, Melbourne, chairman Australian Wool Council; William Riggall, solicitor, Melbourne (Messrs. Blake and Riggall).

Australian Board.—Sir John Michael Higgins, chairman and governing director; William Stevenson Fraser, William Allan Gibson, John Mackay, Charles Robert Murphy, William Riggall.

British Board.—Sir Arthur Horne Goldfinch, chairman and governing director; Sir John Ferguson, James Alexander Cooper, Francis Willey, Henry Ernest Davidson.

Consultative Committee in Australia.—Walter James Young, general manager Elder, Smith and Co. Ltd.; Sir Henry Yule Braddon, Australian superintendent Dalgety and Co. Ltd.; James Kidd, general manager for Australia Australian, Mercantile, Land and Finance Co. Ltd.; James Mansfield Niall, chairman of directors, managing director Goldsbrough, Mort and Co. Ltd.

Advisory Council in Australia.—Eighteen members from all Australian States, representing Australian wool industry. (Names of members of advisory council will be announced at a later date.)

Solicitors.—Messrs. Blake and Riggall, Melbourne.

Acting Secretary.—James Miller Balfour, F.C.I.S.

Our English Wool Letter.

(Specially written for "The Pastoral Review.")

LONDON, 18th December, 1920.

Can Wool be Stabilised?

Things get worse—decidedly so. The past month has witnessed a gradual dropping of prices until values are now on a lower level than anyone expected to see during 1920. The year is fast drawing to a close, and it will always be looked upon as one of unparalleled boom and unparalleled slump. There has been no saving factor in operation during the whole of the past four weeks; instead of trade improving, there is distinctly evidence of business coming to a standstill. Readers may think this a black picture, but it is true to the very letter. The writer has known the wool trade from infancy, being actively engaged in the mill life of the West Riding since school years finished, but a time like the one we are passing through at the spinning and manufacturing end of the industry has never been known in the history of Yorkshire. Big mills which for years have been working day and night are now closed; some are working only eight hours per week, others twelve. The majority have so far been able to keep running twenty-four hours, but even the latter is only half a working week, and in face of the fact that for years all mills have been working till 8 p.m., and many day and night, the contrast to-day is hardly believable.

London and Colonial Markets.

Another series of sales opened last week in Coleman-street Wool Exchange, but readers will have already been advised by cable as to the course of values. There has been a great shout in some quarters during the past two months over high Government reserves, but the writer's contention has turned out to be true to the very letter. There are those who persistently declared that more British Government owned wool would have been sold if limits had been lowered. But the increase would not have amounted to 50,000 bales, and if wool had been sold at any ridiculous price bid, what would the Australian Parliament and growers have had to say? That aspect of the case has been entirely overlooked, and Sir Arthur Goldfinch is to be heartily congratulated upon turning a deaf ear to would-be advisers for not lowering limits until this series. The Ministry of Munitions have done their utmost to save values in Australia and stimulate activity at the various selling centres by holding wool in London with a firm hand, and limits here have not been lowered until Australian selling values were very sensibly below those of Coleman-street. Let no one think for a moment that this is a hit against Sydney, Melbourne, or any other selling centre. The writer strongly resents put-

ting one market against the other, and shouting about the advantages of any selling centre. Each has an equal right to exist. The point is that values in Coleman-street have been purposely maintained with a view to helping Australian selling centres. That some decent prices have been made for really superior warp Merinos goes without saying, but the bulk of the wools sold in Australia have been 25 per cent. below Coleman-street clean scoured values, there being evidence of this in the fact that importing topmakers have offered forward contracts at exceedingly low values, far below the price at which tops could be made out of wool bought in Coleman-street. There are topmakers in Bradford to-day offering good average 64's tops at 3s. 6d. for next March, and while we admit that this is a little price, it is correct to say that good warp 70's wool clean scoured is being bought in Australia on a clean basis of 3s. 6d. landed Bradford. There are no such prices in London to-day. Last series really superior warp Merinos were selling on a clean basis of 90d., but last week the Government had lowered their limits on some good Tasmanian Merinos, making the clean scoured cost 75d. to 78d. Of course, all wools are not selling on so high a clean basis, but anything around 42d. clean can only be middling in quality and combing character. The sale of the 42d. wools referred to as being bought in Sydney took place three weeks ago, and values are now 20 per cent. down, which means that these 70's warp Merinos can be landed Bradford at sensibly less.

The following are the clean scoured costs of wool in London to-day:—

Quality.	Price. d.	Quality.	Price. d.
70's	50	58's	29
64's	40	50's	24
60's	34	44's	18

Trade Demoralised.

We hope readers of "The Pastoral Review" realise the state of trade throughout Europe and America. The writer has never witnessed such scenes as are in evidence to-day. We have already referred to the extraordinary manufacturing conditions, and how mills are running anywhere from eight to twenty-four hours weekly, a condition that no living member of the trade has ever known before. There is great concern among workpeople, and well there might be. Manufacturers who are carrying big stocks of pieces, all of which were ordered and have been cancelled, cannot go on indefinitely making more pieces to stock, for cloth to-day costs something notwithstanding the big shrinkage in wool values. In fact, wool to-day is a very unimportant item when calculating costs. The writer got out a table the other day showing what a 16-oz. indigo blue serge would cost if Merino combing wool could be got for nothing on the station in Australia. It is impossible to guarantee every item being accurate, but on the whole the table given is a fairly reliable one. Alongside this, figures should be given showing as near as possible the approximate cost of growing Merino wool on the station. However, the table below assumes that wool is to be had for nothing on an Australian station, and shows what it costs to bring it home to Bradford and turn it into a 16-oz. blue serge:—

	Present Costs. d.	Pre-war Costs. d.
Cost of labour on sheep station per lb. of wool, estimated at	1	½
Cost of delivering wool at Australian port from sheep station, estimated at	½	¼
Cost of landing wool in Bradford from Australian port	3½	1½
Sorting	¼	¾
Estimating that the wool yields 50 per cent. and there is no appreciable loss in sorting, the clean scoured wool costs	10½	4½
Cost of combing, plus sinkage, less noll	6½	2½
Cost of spinning to 2-32's, reckoning waste	21	4½
Cost of weaving to a 16 oz. cloth, reckoning waste	16	4½
Cost of mending, dyeing and finishing	28	6
	82¼	22

The trade has naturally been more or less startled at the proposals made by Mr. W. M. Hughes for getting rid of the heavy stocks of British Government owned wool. The outline of the scheme received by cable intimates that a British-Australian Wool Realisation Association has been formed, the object of which is to obtain control, and dispose of 2,000,000 bales of old clip wools now in the hands of the Imperial Government, the capital to be realised being £25,000,000. We want to be strictly fair and impartial in what we say, having at heart the interests of Australian and New Zealand woolgrowers. The scheme has no doubt been brought forward with the object of saving the entire trade, and particularly to ensure reasonable paying prices for the new clip. What the trade here does not like is the spirit of dictatorship which seems to be behind the whole scheme. This may be denied, but that is the impression that prevails on this side. No regard seems to be paid to the operation of the law of supply and demand, and if 2,000,000 bales of British Government owned wool is taken off the market, there will remain at least 4,000,000 bales of consumable wool in the world, for there is not only, say, 2,300,000 bales of new clip wools in Australia and New Zealand, but there are new clips in South Africa and South America, besides a big weight of old clip wools which growers are keen to sell. When there are fully half of last season's clips in the United

It may seem a paradox, but the majority of users do not want cheap wools after the order of 1901, when good Merino

Ship.	Destination.	Date of Departure from last Aust. Port of Calling	Shipped from--						Arrived at Port of Destination.		Afloat. Bales.
			N.S.W. Bales.	Vict. Bales.	Q'land. Bales.	S. Aust. Bales	W. Aust. Bales.	Tas. Bales.	Date.	Bales.	
Dorsetshire	Liverpool.	Oct. 20, 1920	4,314						Jan. 11	4,314	
Calcutta	London and Continent	" 25	1,716	10,088					" 28	11,804	
Canadian Inventor	Vancouver	" 28	594	165					" 10	759	
Cellen	Antwerp	" 29	379	25		783			"		1,181
Canastota	New York	" 31	2,155			100			Jan. 27	2,255	
Canadian Exporter	Vancouver	Nov. 6		86					" 10	86	
Night Companion	London	" 6		6,637		5,547			"		12,184
Affleck	Boston and New York	" 6	1,406	5,086					"		6,492
Arken	Continent	" 17	49	364		105			Jan. 13	518	
Scania	United Kingdom	" 19	5,855	3,193		2,279			" 3	11,327	
Unic	"	" 19	4,188	4,287		9,142			" 8	17,617	
Arabah	"	" 21	1,268	6,062					" 28	7,330	
Liberty	New York	" 22		1,480					"		1,480
Rinaldo De Brescia	Continent	" 30	10,147	334		101			Jan. 19	10,582	
Derbyshire	London	Dec 1		256					" 30	256	
Curry	United Kingdom	" 1	414	4,698					"		5,112
Port Chalmers	"	" 2	400	7,697					"		8,097
Port Napier	London	" 2	9,859						"		9,859
Wyrshire	"	" 3	2,195						"		2,195
Alulu	U.K. and Continent	" 3	1,102	1,648			128		Jan. 29	2,876	
Lysses	United Kingdom	" 3		3,484	4,421	1,688			"		9,593
eland	New York	" 7		734	2,741				"		3,475
Arpentaria	United Kingdom	" 9	2,721	526					"		3,247
Padua	Madras	" 9				94			"		94
San Monro	Continent	" 10				1,084			Jan. 28	1,084	
Antua	London	" 10	187	606		510			Feb. 1	1,303	
Warfield	Continent	" 10		3,039	9,449	5,146			"		17,634
Errima	London	" 14		1,025		1,340			Jan. 24	2,365	
Uripides	"	" 15	3,016	1,714	4,544				" 2	9,274	
Monte	"	" 22	591	244	1,175		146		" 24	2,156	
Oncallere	Continent	" 23	4,950	7,405		1,302			"		13,657
City of Edinburgh	United Kingdom	" 24		2,452		11,622			"		14,074
Alma	London and Continent	" 24	98	13,536					"		13,634
Id Maru	Yokohama	" 31		340	1,496				"		1,836
Longarra	London and Continent	" 31	1,173	809	3,187		490		"		5,659
Perakarta	Rotterdam	" 31	766	277	6,434	864			Feb. 1	8,341	
Corral	United Kingdom	Jan. 1, 1921	202	4,373	1,946	3,640			"		10,161
Baroa	Singapore	" 4					589		"		589
Riveto	London	" 4	1,581	84	1,459		249		"		3,373
Ulla	U.K. and Continent	" 6					317		"		317
Australbrook	London	" 7	1,090	6,057					"		7,147
Estor	United Kingdom	" 12		2,020	5,628	372			"		8,020
Arathon	London	" 14	292	692	3,479		2,579		"		7,012
Snaren	Continent	" 14	9,358	2,176		712			"		12,216
Orea	London	" 14		271		289			"		550
City of Newcastle	United Kingdom	" 15		4,416	3,270		760		"		8,446
omeret	"	" 15		1,521					"		1,521
City of Madrid	Boston and New York	" 17				646			"		646
Okatay	New York	" 22		2,523	178				"		2,701
Port Albury	London	" 25			3,991				"		3,991
Umara	"	" 28			1,720				"		1,720
Enalla	"	" 31	1,137	984					"		2,121
Ango Maru	Yokohama	" 31			1,011				"		1,011
Totals									94,247	201,121	

combing wool was selling at about 10d., and good medium crossbreds at 4d. in London. Such prices never did any good either to grower or manufacturer, and never will. Users recognise that it is in their interests to see wool selling at a paying price to the grower, and trade is far more healthy with medium crossbreds at 12d. and good grease combing wools at 18d. than when they are 50 per cent. less. Even to-day reasonable wool values will ultimately pave the way for renewed activity in piece goods, but the serious factor is to get rid of the big stocks of dear pieces which are hanging like a millstone round the neck of the trade. Many feel that no matter what efforts are made by the Wool Realisation Association nothing can avail to arrest wool values until the present heavy stocks at this end are shifted, and new business is given out which is going to set running the spindles and looms of the mills in Great Britain, America, and on the Continent. Many here believe that Australian growers and others do not fully realise the state of trade at this end, but it is a fact that business is paralysed, and the effect is only too plainly evident in every wool market in the world.

North American Wool Market.

The Canadian Department of Agriculture advises under date 17th December, 1920:—Very little activity has been reported in the Canadian wool trade during the past week. Prices remain steady. United States advices indicate that a large part of the 1920 clip still remains in the hands of growers or in growers' pools.

"Ballots Better than Bullets."

At the annual convention of the A.W.U., held in Sydney, the president, Mr. Arthur Blakeley, in the course of his address, said:—

"A general strike at present would be a tragedy for the workers. The result of the ballot on arbitration shows that the members of the A.W.U., by an overwhelming majority, have decided to adhere to arbitration. This is especially significant in view of the increasing propaganda which has been in operation for some time past. . . . In America there has been a campaign in operation for some months, its objective being a reduction in wages. In England and other European countries the same tactics may be observed, and in Australia the employers have started their campaign. It will require all the wisdom and vigilance of organised Labour during the coming year to prevent a serious set-back to industrial unionism. There are some who contend that the general strike is the panacea for all industrial wrongs. A general strike at the present time would leave us a rabble instead of a solid, militant body. Throughout Australasia unemployment is rife, and will no doubt become accentuated before the crisis is past. At the present time there are over 50,000 unemployed through various causes. Then there are others who preach that the only way to emancipation is through blood and fire, whose dearest desire is to see the streets flowing with blood. If blood is to flow it will be the blood of the workers, and not the blood of the employers, and, incidentally, not the blood of those who are so apt with their appeals for blood. Many such appeals were made in 1917 at Sydney, but when the charge was made the urgers were missing. Ballots are better than bullets."

We congratulate Mr. Blakeley on the moderate tone of his speech, but he has failed to realise the fact that the only panacea for the present ills of industrialism is an acceptance of wages that industry can afford to pay. This would automatically right matters by giving an impetus to business, increasing employment, and bringing down prices in accordance with inflexible economic laws. One of the greatest bars to industrial harmony is the suspicion with which each party regards the other. Employers don't want to grind the soul out of their men at a starvation wage, and the men themselves are perfectly capable of giving a square deal. They only need to come together in an amicable manner to settle their differences, which is just what a few paid agents of the devil fight against all the time.

Live Stock Position of the World.

A tabulation has been prepared by the Bureau of Crop Estimates (U.S.A.), comparing the number of meat producing animals in certain specified countries at the latest available official census with the totals before the war. The twelve European countries selected are:—Denmark, Finland, France, Germany, Italy, Netherlands, Norway, Rumania, Spain, Sweden, Switzerland, and United Kingdom, and the twelve non-European countries:—Argentina, Australia, Brazil, British South Africa, Canada, Formosa, India, Japan, Korea, New Zealand, United States, and Uruguay:—

	Before War.	After War.	Increase + Decrease -
Cattle—			
12 European ...	72,000,000	63,000,000	- 9,000,000
12 non-European ...	271,000,000	311,000,000	+ 40,000,000
	343,000,000	374,000,090	+ 31,000,000
Sheep—			
12 European ...	87,000,000	78 000,000	- 9,000,000
12 non-European ...	345,000,000	318,000,000	-27,000,000
	432,000,000	396,000,000	-36,000,000
Pigs—			
12 European ...	49,000,000	29,000,000	-20,000,000
12 non-European ...	89,000,000	102,000,000	+ 13,000,000
	138,000,000	131,000,000	- 7,000,000

Perhaps the most striking feature about the table is the reputed increase in cattle stocks in non-European countries. This should be more than sufficient to make up any deficiency in meat supplies in Europe. The all-round decrease in sheep is not likely to affect the European food position to any extent, as most of the countries specified are primarily beef eaters. On the other hand a decrease of 36,000,000 sheep may make some appreciable difference in the production of wool, which should be an advantage at the present time. The European loss in pigs is largely made up by the increase in other countries.

For King and Country.

The time has arrived for everyone to line up and take a definite stand for his country. A small, but unfortunately well organised, body with a backing of large sums of foreign money is insidiously working all the time to burst up the British Empire, freedom's main bulwark. If the British Empire could be melted away there would remain a free run throughout the world for the enemies of civilisation, and such times as were prevalent during the Spanish Inquisition would be seen again.

At present, as during the last hundred years, the British fleet has kept the whole world free, and the section above referred to know it. They are up against a rock all the time, and no open attack can move it. However, they are mining and get behind the ramparts in places, so it is now up to everyone of us to at once join a league such as the King and Empire League in New South Wales and start actively countermining.

Every pressure should be used to get every traitor deported, if a foreigner, to his own country, but if an Australian, do as they do in Argentina, to an island away from newspaper publicity. We don't want them here, we want our country to again become prosperous, and it can only become so under the Union Jack.

Payment of Taxes.

Half-yearly Instalments.

Sir Joseph Cook, Federal Treasurer, stated last week that a concession had been made by which people were allowed to pay their taxes in two half-yearly instalments. He said that he would like very much to adopt quarterly payments, but it was questionable if this could be done owing to the scattered population.

Top Market Values for Wool



This is the function of Winchcombe, Carson's business as selling brokers. And that object is kept constantly in view.

Demand this season is limited. It is difficult to say when the whole of this year's clip is likely to be cleared up. But perseverance will eventually achieve that end.

Meanwhile the sheepowner's safest step is to place his wool in the hands of capable salesmen. Men in whom he can place complete confidence—sure of their judgment and capability. The wool market has been uncertain before. With care and skill, however, the difficulties have been overcome.

Consign Wool :—

Winchcombe, Carson Ltd.,
Sydney OR Brisbane

SHEEP, FARM & STATION MANAGEMENT

Mr. W. T. Ritch, the well-known Australian Wool and Sheep Expert, now in America, writes:

"You cannot be too highly congratulated on your splendid book, and those who read it and derive much benefit from the valuable instructions it contains cannot be too grateful to you for its production. In Australia, one copy should be kept in every farm and two copies in every pastoral home, and used as a handbook by the employees. It also deserves a place in every public library and the library of agricultural colleges. Elsewhere the library of any man directly or indirectly connected with the wool-growing industry is incomplete without it."

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Queensland Ltd., Gladstone,
Queensland.**
BUYERS OF FAT STOCK FOR EXPORT.

Meat and Produce Trades.

Position and Prospects in Australia.

The Season.

Seasonal conditions continue favourable over the bulk of pastoral Australia. There has been little rain in the south since last writing, and the old feed in the paddocks is retaining its nourishing qualities well despite the high temperature experienced. A few grass fires have been reported, but in all cases they were checked before doing much damage. This is providential, as with an abundance of dry grass everywhere a fire that once really got out of hand would cause most serious losses. Queensland and the Northern Territory recorded more or less heavy storms the middle of January, and the country right through is described as in good order. Live stock generally are in good to prime condition.

Current Operations.

As far as the southern States are concerned the trade is quiet in the extreme. It is true some of the New South Wales works have been treating a few lambs and fewer sheep for export during the month, but operations are very much of a hand-to-mouth character. None of the works in Victoria or South Australia have done anything worth mentioning. The selling price of mutton on the other side, and the market for wool, skins and tallow here are such that sheep must drop considerably before shippers can operate to any extent. Lambs, owing to the control price in Great Britain being much higher, are in a different position, although even these are mostly above export level. The country, however, is in such good heart that graziers are able to hold on to their stock.

The beef season in Queensland is getting under way. According to the last advice the Gladstone and Lake's Creek works opened towards the end of January, and Messrs. Cooke's and Borthwick's establishments on the Brisbane River early in February. Others in the Brisbane district were to commence operations later in the month, and those located in the north somewhere about April. The North Australian Meat Co. Limited (Vestev's) have definitely decided not to kill at their Darwin, Northern Territory, works this season.

Official figures recently published show that the total number of stock killed at the different meat works in Queensland during 1920 was 247,147 head cattle and 11,477 sheep, the numbers for the previous year being 306,596 cattle and 298,396 sheep. The falling off in cattle numbers may be attributed to various causes besides the weather. No doubt the low prices for hides, tallow and by-products were largely responsible, but the strikes in the north also had their effect on the output. The men shut the works down in the middle of the season, and thousands of head of stock had to be turned away. What will happen this year nobody can say. There are enough cattle in the country to enable the works to largely increase their output, but whether they will or not is purely a matter of conjecture. At the moment it hinges on the question of whether the raisers of the cattle will be content to accept lower range of values for their stock than in 1920. The market for beef is uncertain, while hides and tallow are to-day at even a lower level than last year.

The clearances of frozen meat from the Commonwealth during January aggregated 21,972 carcasses mutton, 107,310 carcasses lambs, and 65,557 quarters beef to all ports, all with the exception of some 7000 sheep, 7400 lambs, and 5500 quarters beef going to Great Britain. The "Marathon," one of the boats to clear, lifted 1345 carcasses mutton and 1946 lambs at Fremantle. This is the first shipment of frozen mutton and lamb from Western Australia for a number of years.

It is expected that fairly heavy shipments of beef will be made from Queensland this month. One boat, the "Argyllshire," is listed to load 4840 tons at Townsville

alone, which is the record for the port. The whole of the balance of Imperial contract meat should be got away during the month, including some that is lying in the Wyndham works, W.A.

The announcement of Mr. Massey, Prime Minister of New Zealand, that as a result of negotiations with the Imperial authorities a reduction of 5 per cent. had been secured in freight rates on meat from New Zealand to Great Britain was noted with interest here. Representations were immediately made with a view to obtaining a similar concession for Australia, so far, however, without success. The rate at present is 1½d. per lb. for mutton, 2d. per lb. for lamb, 1½d. per lb. for beef, all plus 10 per cent. Perhaps when the Imperial control over refrigerated freight ends in April or May rates may drop of their own accord. To-day they are more than 100 per cent. above the pre-war level.

The Queensland Meat Contract.

Negotiations have been opened between the Government and the meat export companies regarding supplies for the State butchers' shops during 1921. It is understood that the preliminary proposals put forward are in no sense acceptable to the southern works' proprietors. No doubt they will be amended in due course, but in the meantime the dilatoriness of the Government in fixing the matter up places the companies in an awkward position.

Northern graziers, even more than those in the south, have always taken exception to the arrangement by which the Government took a certain proportion of the meat treated at the meat works for use in the State shops. As the bulk of the meat is treated in the north, but consumed in the south, the system is considered an unfair tax upon the meat industry there. The protest is being supported by others than graziers. At a meeting of the Charters Towers Chamber of Commerce the other day it was decided to wire to the Government pleading that, in face of the fall in the price of beef likely to be experienced in the north on account of hides and by-products being practically unsaleable, the "seizure" of meat by the Government at 1½d. below the market price should not be continued. It is pointed out that such an imposition entails hardship to many small cattle men in the north, as this alone represented a loss of from £3 to £4 per beast to the sellers.

With the expiry of the old contract on 31st December the Government lost no time in availing itself of its freedom to sell cattle from the State stations to private buyers. Under the agreement it was debarred from sending cattle outside of Queensland, but as soon as the term was up at least one line of 2000 head has been sold at a good price to a buyer in New South Wales. Of course the Government is quite within its rights, even if the action is hardly consistent with its avowed policy to keep prices down within the State. Perhaps, though, it prefers that that should be done at the sole expense of private graziers.

Position and Prospects in New Zealand.

(FROM OUR OWN CORRESPONDENT.)

CHRISTCHURCH, 1st February, 1921.

The freezing works from Auckland to Pukeuri (North Otago) are now open, and stock is coming forward freely, lambs of course taking first place. Owing to the delay in opening the works in the North Island, there were ample supplies awaiting, and in Canterbury the dry weather and shortage of feed made many farmers anxious to get rid of their fat sheep and lambs before they went back any further. The Canterbury lambs are well grown, but only from districts favoured for feed are the lambs coming forward really prime. The late rains have, however, greatly benefited the rape crops which were not scorched out of existence by the heat wave a month ago, and as the rain at present falling will improve the pastures, the primer drafts will come forward later.

Frozen Meat Prices.

Now that the freezing works are open, some idea may be obtained as to the prices being paid for meat at this end.

At Auckland the season opened at 9½d. to 10d. per lb. for fat lamb, and it is stated that a better price can be paid for lamb at Auckland than elsewhere, because of the market there is at Vancouver. For wethers 5½d. per lb., and for ewes 4½d. per lb. was paid, while for cow beef 35s., and for ox beef 45s. per 100 lb. was offered. Late cable messages indicate a lower market at Home for mutton and lamb, and in the Wellington district the stock market was adversely affected by this information, and it was anticipated that freezing values of mutton would decline ½d., and lamb ¼d. per lb.

The Canterbury season opened at about 9½d. for lamb, 5½d. for wethers, and 4½d. for ewes, but while both wethers and ewes are slightly easier, lambs have been selling above the foregoing quotation. Under competition in the saleyards 9½d. and up to 10d. per lb. has been paid. At the latter figure it is also reported that large purchases have been made in country districts.

Slaughtermen.

Now that the dispute with the freezing works employees has been settled, the question is the supply of men. Slaughtering at all the North Island and the Canterbury works is now going on, but additional hands are still required. About thirty slaughtermen arrived a short time ago from Australia, and others have been held up by the shipping trouble over there. There is reported to be a shortage, particularly of beef slaughtermen, and the killing of cattle will not start in Canterbury until the current month.

Clearance of Imperial Meat.

When the Imperial requisition of frozen meat came to an end on 30th June last, farmers and some others were anxious what the future would hold in prospect of securing the shipment of this season's meat, which was not subject to the commandeering. The Prime Minister at the time was optimistic, and, while endeavouring to obtain the greatest amount of shipping possible so as to reduce the quantity of meat held in store, he held to the opinion that the new season would find New Zealand with very little to worry about in this direction. Events have fully justified this optimism, as the following statement shows. Shipments in January will practically clear the stores of mutton and lamb, which are the property of the Imperial Government, and there will also be space for a considerable quantity of the new season's killing, and for butter and cheese. The total allocations for January were:—Imperial mutton, &c., 350,980 freight carcasses; Imperial beef, 120,000 carcasses; free meat, 1920, 148,309 carcasses; free meat, 1921, 182,911 carcasses; total, 802,200 carcasses.

In addition to the meat, there will be space in the January steamers for 369,600 boxes of butter, and 115,250 crates of cheese. The Imperial beef, 479,277 freight carcasses, remaining on hand after the January allocations of space, will be lifted by steamers arranged by the purchasers, Messrs. Vestey Bros. With the large amount of extra freezing space provided at the works during the war, there will be no trouble in taking in all the stock offering this season, providing sufficient hands can be obtained.

Reduction in Meat Freight.

The Government has for some time past been endeavouring to secure a reduction in the freight rates for frozen meat and other produce shipped from New Zealand to Great Britain. A cable message came to hand three weeks ago from the High Commissioner stating that the Ministry of Food had informed him that revised rates for the carriage of private meat to the United Kingdom had been fixed as follows:—1½d. per lb. for mutton, 2d. per lb. for lamb, 1½d. per lb. for beef, all plus 5 per cent.

This means a reduction of 5 per cent. on the rates previously fixed, to which the Government had taken exception. In those rates the charges for mutton, lamb, and beef respectively were the same as quoted above, but with an additional 10 per cent. instead of 5 per cent. as now established. The Government is in further communication with the High Commissioner on this subject of freight rates, in view of the heavy burden which is still imposed upon producers.

Decontrol of Meat.

The Prime Minister has been endeavouring to get some definite information through the High Commissioner as to what the Imperial authorities intend to do regarding the control of frozen meat prices. Owing to the holidays it was some time before he could get a reply. On 10th January he received a cable message from the High Commissioner stating:—"While it has not been possible to obtain a definite statement as to the date of the removal of the price control, I gathered that the Imperial Government is equally anxious to restore the free market. It is not expected that the Imperial meat will be liquidated before May, but although no indication has been given that price control will cease immediately Government stocks have been sold, it appears possible that control will not extend beyond the end of June. It may be removed even a month earlier."

Class of Mutton Required.

Mr. H. S. Fitter, head of the firm of H. S. Fitter and Sons, the Smithfield meat salesmen, who, with his son, Mr. S. H. Fitter, has been visiting New Zealand, in the course of a statement upon the frozen meat market, said:—"There is one point that I should like to emphasise for the benefit of farmers. During the past season an exceptionally large quantity of small sheep was shipped from the Dominion to the United States, with the result that the supplies now being shipped to the Old Country by New Zealand exporters have not the usual quantity of small sheep. For the greater part, the shipments, from my own observations, consisted of large sheep, and possibly there may be a surplus of the latter class in London. In the future, the demand for the smaller sheep will be greater than before the war. Another reason why the farmer should get the sheep away before they are too big is that the high prices ruling at Home make it impossible for the average house-wife to be continually buying large joints."

Refrigerated Motor Truck.

The accompanying illustration shows a type of semi-trailer truck that has been adopted by Messrs. Morris & Co. for the transport of frozen meat in Chicago, U.S.A. The body is heavily insulated throughout with cork, and is constructed on the principle of the standard railway equipment used for the same purpose in the United States of America. It is



A 15-TON REFRIGERATOR TRUCK
Loading fresh meat at a Chicago packing plant.

45 ft. long, 11 ft. 3 ins. high, and 7½ ft. wide, the beef quarters being suspended from the roof as in the rail cars. Efficiency is proved by the fact that dressed beef loaded at a temperature of 35 degrees above zero has been held in transit for as much as seven hours without an appreciable rise in temperature. At present the Morris Co. is using a single tractor with three semi-trailers, and is able to transport up to 180 tons of meat in Chicago and environs in 24 hours. Apart from an actual saving in haulage costs, the trucks ensure the arrival of beef at its destination in perfect condition. What a difference to the methods employed in distributing meat in the principal cities of Australia, and in conveying carcasses intended for export to the ship's side at ports like Sydney.

American Meat Packer Legislation.

A cablegram from Washington, dated 25th January, states that the Senate has passed a bill creating a Live Stock Commission to regulate the meat packing industry.

The measure makes unlawful any defrauding practice, such as apportioning the supply of live stock among packers unreasonably in such a way as to affect prices or to create a monopoly. Packers are not permitted within two years to have any interest in stockyards. Packers and stockyards must be registered. Three commissioners will enforce the law, violations of which will render offenders subject to fines ranging from £200 to £2000, and imprisonment up to five years.

From the foregoing it appears that the Government has at last succeeded in divorcing the packers from their stockyard interests. The schemes they, the packers, had put up in compliance with the Palmer decree were generally considered impracticable. When the last mail left the Government had just filed with the Supreme Court a petition for the appointment of a trustee to take possession of and sell, after due notice to defendants, all the stockyard properties of the "big five." The grounds for the petition were that although nine months had elapsed since the decree the packers had failed to submit a suitable plan to the court. Particulars of one of the divestment schemes appear in the December issue of The Review. Others are on much the same lines.

New Zealand Frozen Meat Exports to the U.K.

(Season taken as from 1st January to 31st December.)

PERIOD.	Mutton.	Lamb.	Beef.
	Carcases.	Carcases.	Quarters.
Total for 1911	1,792,067	3,326,843	147,154
Total for 1912	2,360,789	3,191,197	149,397
Total for 1913	2,210,648	3,399,119	127,495
Total for 1914	2,771,102	3,644,777	371,604
Total for 1915	2,929,412	3,806,421	526,119
Total for 1916	2,456,115	3,118,317	727,772
Total for 1917	1,964,530	1,550,712	615,867
Total for 1918	1,348,884	1,317,989	537,017
Total for 1919	3,645,704	3,376,168	554,363
Total for 1920	4,676,575	2,031,473	594,546
Monthly Totals, 1920.			
January	216,214	119,437	20,016
February	256,935	157,578	20,852
March	243,434	112,624	16,615
April	189,346	157,159	33,380
May	337,340	228,274	43,455
June	298,874	334,471	45,373
January to June	1,541,973	1,109,543	179,491
July	519,521	363,743	102,626
August	177,277	65,391	16,646
September	453,148	155,064	112,958
October	623,075	62,754	82,123
November	598,696	30,854	—
December	762,885	244,124	100,702
July to December	3,134,602	921,930	415,055
1921.			
January	475,507	5,269	3,179
Clearances reported for Jan.—			
Jan. 4—Port Napier	105,995	—	—
" 6—Armagh	123,930	—	—
" 8—Kaikoura	91,740	5,269	—
" 10—Port Chalmers	92,337	—	—
" 17—Port Adelaide	61,505	—	3,179
	475,507	5,269	3,179

* In addition to the above, 279,088 carcasses lamb were shipped to U.S.A. in March, and in April 222,568 carcasses lamb to U.S.A. and 6851 carcasses mutton, 11,875 carcasses lamb to Vancouver, B.C., and in July 20,092 carcasses mutton, 360,493 carcasses lamb to U.S.A. In August 6529 carcasses mutton, 96,987 carcasses lamb to New York, 10,060 carcasses lamb to San Francisco, U.S.A., and 3500 carcasses lamb to Vancouver, B.C. In September 21,317 carcasses mutton, 438,544 carcasses lamb to New York, U.S.A., and 6000 carcasses mutton, 3281 carcasses lamb to Vancouver, B.C. In October 126,914 carcasses mutton, 212,730 carcasses lamb, 593 beef to U.S.A., and 1000 carcasses mutton to Vancouver, B.C. In November 106,426 carcasses mutton, 173,325 carcasses lamb to U.S.A., and 2000 carcasses mutton, 4553 carcasses lamb to Vancouver, B.C. In December 183,913 carcasses mutton, 104,190 carcasses lamb to New York, and 559 carcasses lamb to San Francisco.

Australian Frozen Meat Exports to Ports other than in United Kingdom.

(Season taken as from 1st July to 30th June.)

Period.	Mutton Carcases.	Lamb Carcases.	Beef Quarters.
Season 1911-12	167,120	26,480	197,479
1912-13	166,474	27,313	206,982
1913-14	224,283	33,529	379,353
1914-15	91,725	806	208,827
1915-16	20,814	10,750	34,902
1916-17	15,785	8,025	13,560
1917-18	320	—	4,171
1918-19	33,039	6,950	26,891
1919-20	154,968	41,612	99,869
Monthly Totals, 1920.			
January	43,402	14,066	5,202
February	26,591	3,501	2,278
March	22,800	2,960	8,671
April	26,330	2,866	5,452
May	2,565	1,032	3,584
June	7,567	9,127	4,111
January to June	129,255	33,552	29,298
July	49,628	2,598	63,707
August	6,305	1,085	1,776
September	4,609	2,675	8,035
October	32,508	1,050	2,307
November	6,386	1,370	6,895
December	1,820	1,619	3,432
July to December	101,256	10,397	86,152
1921.			
January	7,053	7,401	6,534

South American Cable Service.

(FROM OUR OWN CORRESPONDENT.)

SOUTH AMERICAN FROZEN AND CHILLED MEAT EXPORTS.

Period.	Mutton.	Lamb.	Beef Qrs.
Total for 1911	3,048,262	1,092,155	3,807,320
" 1912	2,500,000	815,000	4,030,000
" 1913	1,909,061	671,290	4,477,160
" 1914	1,876,578	805,296	4,378,619
" 1915	921,436	442,132	3,531,842
" 1916	1,190,524	637,160	3,650,000
" 1917	783,250	408,250	2,795,500
" 1918	1,272,717	236,822	6,081,660
" 1919	1,462,366	216,014	5,119,928
" 1920	1,393,923	527,317	4,804,562
Monthly Totals—1920.			
January	95,487	7,616	419,810
February	124,306	22,836	419,027
March	76,952	3,271	473,444
April	108,578	69,594	420,881
May	25,600	52,000	174,500
June	45,000	92,000	375,000
January to June	475,923	247,317	2,282,662
July	223,000	50,000	432,900
August	145,000	27,000	527,000
September	182,000	44,000	485,000
October	184,000	59,000	466,000
November	78,000	14,000	262,000
December	106,000	82,000	349,000
July to December	918,000	280,000	2,521,900
1921.			
January	91,000	64,000	308,000

At a meeting of shareholders of the South Canterbury (N.Z.) Freezing Company last month the chairman announced that the estimated cost of the proposed works was about £150,000. The action of the directors in not accepting a tender was approved, and they were empowered to take steps to raise sufficient capital to enable the works to be built free of outstanding liability. It was agreed to make further efforts to bring about an amalgamation with the new Waitaki Freezing Company, which is busily canvassing North Otago with a view to raising capital for works to be located between the Pukeuri and Pareora factories.

Australian Frozen Meat Exports to United Kingdom.

(Only such vessels as have actually cleared the Australian Coast during any given month are included in that month's return.)

Season taken as from 1st July to 30th June each year.	NEW SOUTH WALES.			VICTORIA.			QUEENSLAND. (Including Darwin.)			SOUTH AUSTRALIA, WEST AUSTR. and TASMANIA.			TOTALS.		
	Mutton.	Lamb.	Beef.	Mutton.	Lamb.	Beef.	Mutton.	Lamb.	Beef.	Mutton.	Lamb.	Beef.	Mutton.	Lamb.	Beef.
1911-12 ..	Carcasses. 909,604	271,527	16,741	Carcasses. 851,034	1,047,182	4,087	Carcasses. 78,549	602	429,731	Carcasses. 69,901	131,340	276	Carcasses. 1,909,088	1,450,651	450
1912-13 ..	808,188	294,424	8,477	618,855	735,621	9,074	681,957	40,424	1,046,000	82,582	117,901	2,846	2,091,582	1,188,370	1,066
1913-14 ..	1,315,437	403,533	78,195	961,914	1,278,898	115,280	402,486	25,250	1,058,213	18,817	34,216	24,064	2,698,654	1,741,897	1,275
1914-15 ..	1,529,702	552,569	135,730	738,774	1,196,410	130,957	628,176	37,301	1,584,946	35,051	81,233	24,396	2,931,703	1,867,513	1,876
1915-16 ..	291,486	361,843	551	—	47,546	—	263,565	52	903,582	—	—	—	555,051	409,441	904
1916-17 ..	436,943	205,695	54,780	52,927	365,274	20,230	432,571	1,722	1,541,762	—	—	2,622	922,441	572,691	1,619
1917-18 ..	81,776	14,052	7,483	48,783	146,908	—	45,026	10	1,399,836	2,212	952	602	177,797	161,917	1,407
1918-19 ..	278,980	63,694	5,006	656,677	31,023	2,491	59,837	—	687,473	38,067	21,295	—	1,033,561	116,012	694
1919-20 ..	828,413	203,992	21,910	2,251,411	1,526,578	13,559	182,597	1,132	749,998	309,113	95,417	7,162	3,571,534	1,917,119	792
Monthly Totals 1919.	—	—	—	—	—	—	—	—	152,238	11,009	8,723	1,554	11,009	8,723	153
July ..	—	—	—	—	—	—	—	—	142,485	8,546	—	—	346,077	105,283	142
August ..	32,343	3,305	—	303,190	101,978	221	1,998	—	115,799	—	—	—	221,427	44,707	115
September ..	87,316	13,975	—	32,051	29,622	—	58,266	1,110	50,910	43,794	—	—	350,775	257,558	50
October ..	37,068	9,598	—	217,028	217,576	—	20,167	—	126,530	76,512	30,384	—	474,658	372,784	126
November ..	100,771	75,788	34	305,037	286,591	—	26,435	—	20,307	42,415	10,405	—	596,130	534,668	30
December ..	118,169	96,133	243	445,105	429,874	5,137	11,339	—	—	21,517	8,661	4,355	—	—	—
July to Dec. 1920.	375,667	198,799	277	1,302,411	1,065,641	5,358	118,205	1,110	608,269	203,793	58,173	5,909	2,000,076	1,323,723	619
January ..	39,006	8,798	803	275,375	203,615	—	—	—	—	5,143	—	—	319,524	212,413	—
February ..	65,579	11,861	1,609	355,202	172,179	3,350	—	—	—	38,984	24,818	—	459,765	208,858	4
March ..	18,591	5,058	—	16,351	938	—	—	—	—	10,409	—	—	45,351	5,996	—
April ..	52,771	10,227	319	124,740	47,828	3,822	49,383	22	54,074	—	—	—	226,894	58,077	58
May ..	146,095	28,586	6,758	164,070	35,647	1,029	15,000	—	41,921	50,784	12,426	1,253	375,958	76,659	50
June ..	130,704	30,663	12,144	13,262	730	—	—	—	45,734	—	—	—	143,966	31,393	57
Jan. to June.	452,746	95,193	21,633	949,000	460,937	8,201	64,392	22	141,729	105,320	37,244	1,253	1,571,458	593,396	172
July ..	21,072	8,531	—	52,112	8,077	—	—	—	34,279	30,757	173	—	103,941	16,781	34
August ..	8,914	2,077	—	33,561	32,088	7,503	793	—	49,216	20,309	4,840	—	63,577	39,005	56
September ..	11,083	12,361	52	167,394	59,451	1,583	—	—	127,463	3,580	477	15,308	182,057	72,289	144
October ..	14,791	325	—	56,140	19,899	1,833	—	—	104,018	4,853	5,539	—	75,784	25,753	105
November ..	25,741	1,100	679	5,826	2,754	52	—	—	4,141	864	634	—	35,708	4,718	1
December ..	1,618	5,933	—	2,100	149,451	—	—	—	58,954	13,850	128	—	17,568	155,512	58
July to Dec.	83,219	30,327	731	317,133	271,710	10,971	793	—	373,930	77,490	12,021	15,942	478,635	314,058	401
1921.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
January ..	9,720	21,717	752	3,854	76,246	—	—	—	58,271	1,345	1,946	—	14,919	99,909	59
Clearances reported, Jan.—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1 <i>Palma</i> ..	—	—	—	—	—	—	—	—	20,295	—	—	—	—	—	20
4 <i>Orvielo</i> ..	—	7,000	—	1,071	1,456	—	—	—	—	—	—	—	1,071	8,456	—
12 <i>Nestor</i> ..	4,700	8,696	—	—	8,718	—	—	—	8,673	—	—	—	4,700	17,414	8
13 <i>Marathon</i> ..	3,020	1,209	752	300	5,992	—	—	—	—	1,345	1,946	—	4,665	9,147	—
14 <i>Morea</i> ..	—	—	—	975	22,641	—	—	—	—	—	—	—	975	22,641	—
25 <i>Pt. Albany</i> ..	—	—	—	—	—	—	—	—	29,303	—	—	—	—	—	29
31 <i>Benalla</i> ..	2,000	4,812	—	1,508	37,439	—	—	—	—	—	—	—	3,508	42,251	—
	9,720	21,717	752	3,854	76,246	—	—	—	58,271	1,345	1,946	—	14,919	99,909	59

1921.

TO OTHER PORTS.

- January 1—*Houtman*—From Queensland: 100 quarters beef to Batavia.
 " 1—*Marella*—From New South Wales: 2395 carcasses mutton, 1411 carcasses lamb to Singapore.
 " 1—*Sonoma*—From New South Wales: 296 carcasses mutton, 1462 quarters beef to Honolulu; and 3165 carcasses lamb to San Francisco.
 " 4—*Orvielo*—From Queensland: 764 quarters beef to Port Said. From New South Wales: 1,100 carcasses mutton, 250 carcasses lamb to Colombo; and carcasses mutton to Port Said.
 " 8—*Mataram*—From New South Wales: 292 carcasses mutton, 1053 carcasses lamb. From Queensland: 2651 quarters beef. All to Singapore.
 " 15—*Kanowna*—From Queensland: 200 carcasses mutton, 100 carcasses lamb to Manilla.
 " 19—*Changsha*—From New South Wales: 328 carcasses mutton to Hong Kong.
 " 31—*Orsova*—From Queensland: 1557 quarters beef. From New South Wales: 2192 carcasses mutton, 1422 carcasses lamb. All to Port Said.

The clearances of frozen meat from the Commonwealth to all overseas ports during January totalled 21,972 carcasses mutton, 107,310 carcasses lamb, 65,557 quarters beef, which, compared with the output for December, shows an increase of 2384 carcasses mutton and 3171 quarters beef, and a decrease of 49,821 carcasses lamb.

When placed beside the total for the corresponding month of last year (January 1920), there is an increase of 59,552 quarters beef, and a decrease of 340,954 carcasses mutton, 119,169 carcasses lamb. An analysis of the various exports for the month under review shows that 14,919 carcasses mutton, 99,909 carcasses lamb, and 59,923 quarters beef were consigned to Great Britain, 296 carcasses mutton, 3165 carcasses lamb, 1462 quarters beef to North America, while ports in the East, &c., take the balance, 6757 carcasses mutton, 4236 carcasses lamb, 5072 quarters beef.

Queensland sent away 200 carcasses mutton, 100 carcasses lamb, 63,343 quarters beef; Victoria, 3854 carcasses mutton, 76,246 carcasses lamb; New South Wales, 16,573 carcasses mutton, 29,018 carcasses lamb, 2214 quarters beef; Western Australia, 1345 carcasses mutton, 1946 carcasses lamb.

Law Relating to Cold Storage in U.S.A.

The States of Utah, Ohio, and Connecticut each have laws requiring retailers to plainly label foodstuffs that have been in cold storage any length of time. The Utah law reads as follows:—

"It shall be unlawful to sell, or to offer for sale, any article of food which has been held for a period of ninety days or more in cold storage, either within or without the State, without notifying the persons purchasing or intending to purchase same, that it has been so held, by the display of a placard plainly and conspicuously marked, 'Cold storage goods,' on the bulk mass or articles of food."

The object is obviously to prevent stored meat, &c., being sold as fresh. The National Woolgrowers' Association, which has been very active in its opposition to the importation of New Zealand lamb and mutton into the United States, is working to secure the enactment of similar laws in all States.

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Meat Notes.

Exports of frozen meat from South Africa during November were 3909 quarters beef, bringing the total for the year up to 21,164 quarters.

W. Weddel and Co. Limited, the well-known English meat and produce firm, have recently opened an office at 477 Collins-street, Melbourne, under the management of Major J. Russell King, S.O. Previously Messrs. Weddel were represented in Australia by John Cooke and Co. Pty. Limited, but that connection being lately severed, the company has established a branch on this side.

Tests carried out by the Food Investigation Board, England, now conclusively that the fungus causing "black-spot" on meat will grow and produce spores at a temperature at least 5 degrees C. below freezing point. So far, the "black-spot" fungus is the only one of the Cladosporium species found to grow below 0 degrees C., but several others of the same family develop fairly well at freezing point.

The Smithfield Cold Storage Company's new works at Lourico Marques were formally opened by the Governor-General of the Mocambique Territory the middle of September. A number of visitors from Rhodesia, Basutoland, Swaziland and the Union attended. Speaking on behalf of Rhodesia, General Sir Reginald Dorrard said the time was coming when Rhodesian cattle men must build their own cold stores or amalgamate with some existing organisation. He was returning to his district, and would advise owners there to affiliate their interests with the Smithfield Company. That company is prepared to assist in the erection of works at Bulawayo if local farmers will put up sufficient capital.

"Cold Storage" says that the Sociedad Frigorifica de Llanquihue are erecting a new packing plant at Puerto Montt, about half-way between Valparaiso and Punta Arenas, Chile, which, when opened in the course of a few months, will give employment to 1000 men. The bulk of the £200,000 capital is British held, the equipment has chiefly come from the United Kingdom, and the plant will be British operated. The opening of the plant is looked forward to with considerable interest, as it will greatly benefit South Chilean stock raisers, whose best market has always been in North Chile, especially in the nitrate zones, where there is neither agriculture nor stock raising. The southerly farmer, moreover, has been hitherto handicapped by his distance from the transport systems of Santiago. The new frigorifico, which will can mutton and beef in addition to freezing carcasses, will offer a readier market for fattened animals.

Position and Prospects in Great Britain.

(FROM OUR OWN CORRESPONDENT.)

LONDON, 23rd December, 1920.

The Current Situation.

Although the Christmas trade is least representative of normal business, there are generally features in it which are significant for the season ahead.

Trade pointers this year, however, are more reliably to be found in ruling conditions not apparent in the market itself. The fact that prices are still phenomenally high—one authority records the fact that they are quite three times the low level touched during the past two decades—this fact alone would not be a guide for what will obtain in 1921.

The buying side of the business is particularly perturbed at this time, and well it might be, in view of the unsettled conditions immediately ahead of us. Wholesale buyers at the moment are only purchasing c.i.f., because they have absolutely got to. They regard the current high figure of 1s. 1d. for new season Australian lamb as one on which they will assuredly make no profit, but be rather fortunate if they escape considerable loss.

Unemployment in general industry is leaping up by bounds, and the world situation is thought to be at the worst. Yet in spite of this, and of the fact that Dutch and Danish meat is now coming here in regular quantities, home-killed

meat still realises its severely high prices, and in this it is helped by the fact that South American beef shipments are still about 20 per cent. or less than what they were before the war, giving the butcher no choice between dear English meat and frozen meat.

English beef at the present time is selling in Smithfield at up to 12s., Scotch 14s. 4d. per 8 lbs., as compared with 8s., the controlled price for imported frozen hinds, and English mutton is making 14s. 8d. per 8 lbs., as compared with the 6s. allowed for frozen sheep. The following is a list of other current market rates, which may serve as a guide to the present complexion of the market:—

Brazilian beef may be quoted 5s. 8d. to 6s. hinds, and 4s. 4d. fores. Argentine hinds 8s., and fores 5s. 4d. New Zealand ox hinds, 6s. 10d. to 7s. 4d.; cow hinds, 5s. 8d. to 6s.; ox fores, 5s. to 5s. 4d.; cow fores, 4s. 4d. to 4s. 8d. Australian ox hinds, 6s. 10d. to 7s. 4d.; cow hinds, 5s. 4d. to 6s.; ox crops, 5s. 2d. to 5s. 8d.; cow crops, 3s. 8d. to 4s. 4d. South African hinds, 5s. 8d. to 6s.; fores, 4s. 4d.

The result of such small quantities of South American beef arriving has been that frozen beef supplies from Australia and New Zealand have sold readily, and the New Year's arrivals of fresher meat from these sources are eagerly anticipated. It can be said at the present time that the stores throughout the country are comparatively empty, and the Ministry of Food is releasing meat to the trade as soon as it is discharged from the ship. This is the main factor in controlling the market tendency, and the huge demand from the continent of Europe is largely responsible for this situation.

Great Britain now no longer stands in her proud position as the only considerable consumer of frozen meat, and the competition she will be called upon to face will make a tremendous difference to the trade.

For one thing, it has given extraordinary strength to the agitation, now proceeding for many years, for the removal of the embargo on the import of live store cattle from Canada, and those who watch the portents in high places see that there is a very good chance of this business being resumed again after such a considerable period.

Undoubtedly, the purchasing power of the public is now quickly on the wane. This is reflected very seriously in the fortunes of a considerable number of big produce importing firms, and more than one undertaking which has been caught during the past month or two with large holdings of canned goods has had to stop business. This poorer condition of the public should not react so detrimentally to the frozen meat trade if the latter is carefully organised to meet the greater popular call, which must be made for the cheaper classes of meat.

Evidently the butchers are concerned, for price reasons, at the prospect of the imminent de-control of imported meat, as a mass meeting of members of the Union of London Retail Meat Traders Incorporated has been called to discuss this question on 4th January. It is to be a ticket meeting.

The usual show of South American prize meat has been partly delayed at Smithfield this year owing to the late arrival of the Nelson liner "Highland Piper," which has only just reached London in Christmas week. Armour's, Morris' and Swifts' array of prize quarters, which reveal the same extraordinary quality, condition, and dressing as in former years, are only on show two days before Christmas. Messrs. Archer and Co., agents of the other trust firm of Wilson, made a wonderful show two days earlier, the prize cattle meat being declared by experts to show nothing wasteful in its quality. The champion carcass was from an Aberdeen-Angus steer, for which Messrs. Wilson paid 5000 dollars, so that the cost per lb. of the meat can be imagined.

This is practically the slowest week of the whole year for the frozen mutton trade, and salesmen are stocking as much New Zealand mutton as they can for sale after the holidays, but there is not much good meat about. Salesmen are looking down their noses at the prospects of a maximum price of 8s. 8d., with c.i.f. purchases in lamb only possible at 9s. a stone.

Smithfield Supplies.

During the three weeks since the despatch of my last London letter up to Saturday last the total supplies of all

kinds at the London Central Markets totalled 27,991 tons, as compared with 21,770 tons in the same period of last year, and 27,880 tons in the corresponding three weeks of 1913.

Of the pitchings during the three weeks under review, 22,491 tons were of British and Irish and imported beef and veal, mutton and lamb, pork, &c., of which the proportions were:—British and Irish, 4995 tons; imported, 17,496 tons. Australasia's share of mutton and lamb totalled 6239 tons; South America's portion of beef and veal 6694 tons.

This week much anxiety has been experienced all round as to whether South American supplies would arrive in time for Christmas. The stalls of the S.A. firms have looked somewhat bare during the past few days, although neighbouring stands have been heavily stocked. Retailers have been buying carefully to avoid large stocks of home-killed at the high rates, and to find at the eleventh hour that prime South American was available at lower rates. All doubts were set at rest yesterday, when a lorry arrived a little after one o'clock with the first consignment of frozen and chilled meat ex the s.s. "Highland Piper."

Latest prices as quoted at Smithfield yesterday were as follows:—Beef—Scotch short sides, 14s. to 14s. 4d. per stone of 8 lbs.; long sides, 12s. 4d. to 12s. 8d.; English long sides, 11s. 4d. to 12s.; Irish sides, 10s. 8d. to 11s. 8d. Mutton—Scotch, 13s. 4d. to 15s. 4d.; English, 12s. to 14s. 8d.; Scotch tegs, 16s. to 17s. 4d.; English tegs, 13s. 4d. to 14s. 8d.; Dutch, 9s. 4d. to 11s. Lamb—Scotch Hill, 15s. 4d. to 17s. 4d. Frozen pork, 10s. to 13s. 8d.

Good arrivals of Australian beef and mutton are reported this week from Birmingham, where frozen pork was plentiful, and in good demand at less money. Imported beef, mutton and lamb were in excellent condition at Leeds, I am informed, and met a good demand. From Manchester I hear that imported meat, chiefly South American, was in ample supply, and met a trade described as "generally fair." There was no frozen mutton available at Dundee last week, and at Glasgow frozen beef and mutton are reported as scarce.

U.K. Imports.

The official returns of the imports into this country of frozen and chilled meat are now available for the first eleven months of this year. The following details give a comparison with the corresponding period of last year:—

Cwts.	November.		Jan.-November.	
	1920.	1919.	1920.	1919.
Beef, chilled ..	220,734	1,961	898,915	125,504
.. frozen ..	849,508	443,657	8,201,201	5,832,443
Mutton and lamb ..	311,443	373,210	5,963,777	3,846,252
Frozen pork ..	64,529	21,529	399,093	115,353
.. rabbits ..	38,865	14,702	484,470	270,338

Examining the beef figures, we note that the imports of chilled beef show a big increase both for the month and for the eleven months, as compared with last year's figures. Argentina's share of the imports last month totalled 205,124 cwts., thus bringing her figures for the first eleven months of this year up to 845,119 cwts. This total is, of course, much below her pre-war figures of imports of chilled; in the eleven months, January-November, 1913, the imports from Argentina of chilled beef amounted to 4,676,214 cwts. Uruguay's figures, however, show 15,610 cwts. for the month of November 1920, as compared with nil the same time last year. This total brings the export from Uruguay to this country for the period January-November, 1920, up to 53,796 cwts., as compared with 1700 cwts. in the same period of 1919, and is not far short of double the pre-war quantity of 31,982 cwts. in the first eleven months of 1913.

Frozen beef imports are on a great scale, the quantity imported last month being practically double the total of November last year, and more than four times the quantity imported in the month of November 1913. The figures for the eleven months, given above, show a notable increase as compared with last year; in the eleven months, January-November 1913, the imports totalled 3,741,281 cwts. Of the imports last month, the greater portion came from Argentina, the figures being 568,351 cwts., bringing her total for the year so far up to 5,271,852 cwts. Uruguay's contribution amounted to 63,009 cwts. last month, making the eleven months' total 729,845 cwts. The imports from Australia last month, 48,605 cwts., show a heavy reduction

more than 50 per cent.—compared with the imports in November last year; the imports for the eleven months this year amount to 709,771 cwts., nearly 250,000 cwts. more than for the same period last year, but comparing with 1,236,797 cwts. in the corresponding period of 1913. The New Zealand total, 125,434 cwts., shows an increase of more than 100,000 cwts. when compared with the figures for November 1919, and brings this year's imports up to 740,844 cwts. This compares with 378,216 cwts. last year, and with 243,367 cwts. in the January-November 1913 period. The imports from the United States, 197,067 cwts., in the eleven months of this year, show a heavy reduction from last year's figures, 837,547, but a notable increase as compared with the figures for the corresponding period of 1913, viz., 1462 cwts.

The month's imports of mutton and lamb in November show a considerable reduction, as will be noted, due mainly to the comparatively small Australian arrivals. These totalled 60,241 cwts., as against 138,392 cwts. in the same month of 1919, and 210,487 cwts. in November 1913. New Zealand, however, record an increase on the monthly figures, her contribution amounting to 154,825 cwts., as compared with 130,198 cwts. in November 1919; last month's imports were more than double those of November 1913, which were 70,884 cwts. The figures for the eleven months, as given above, show a notable increase, and compare with a total import in the January-November 1913 period of 4,821,033 cwts. Australia's contribution has grown from 1,398,088 cwts. in the 1913 period to 2,156,761 cwts. this year; increases are also recorded from New Zealand and from "other countries," but South America's share has dropped away. Uruguay sent in the period under notice 26,926 cwts., as against 171,111 in the corresponding period of 1913; Argentina's totals for these periods were 704,451 cwts. and 906,627 cwts. respectively.

Firms' Reports.

L. C. Ballantine and Co. (Forward Buyers Cautious), 20th December, 1920:—"December supplies have been very light, and Government-owned mutton and lamb sold very readily. Offal also has been very short, and New Zealand sheep's kidneys reached 5s. dozen. Home-grown Dutch and Danish meat plentiful at very high prices. Chilled beef short, and shipments to Continent of the Australian and New Zealand beef causes frozen Argentine to be in good demand. With regard to the forward market, buyers are turning their attention to forward purchases of New Zealand mutton and lamb, but the high prices asked render their operations cautious."

Henry S. Fitter and Sons (Strong Demand Likely), 21st December, 1920:—"The demand for New Zealand mutton and lamb has been very good up till the beginning of this week. However, during Christmas week the trade for imported mutton is always slow, and for the first time for some weeks past, the supply has been equal to the demand. There has been quite a satisfactory demand for beef, and as the shipments from South America have not been heavy, a large share of Australasian beef has gone into consumption. The new year should bring a strong demand for the bright meat, which is now on the way from New Zealand. The uncertainty as to when fixed prices would be removed has prevented much forward selling of new season meat, although an optimistic view is held of future prospects. Home-killed meat still realises high prices, in spite of the fact that Dutch and Danish has been arriving in regular supplies and in very good condition. South American beef has not been quite so plentiful as in the preceding month, but some parcels of very fine quality meat are expected to arrive in time for the Christmas market. Imported meat sundries are still in very good demand and very short supply."

Gordon Woodroffe and Co. (Public's Purchasing Power Decreasing), 22nd December, 1920:—"At the present moment the supply of meat which is still in the hands of the Government does not meet the demands of the trade, although the Ministry of Food are, of necessity, releasing meat as soon as discharged. The position is unusual, as pre-war there was always sufficient meat in store equivalent to three or four weeks' supply. Very little mutton is available from Australia, and the shipments from New Zealand consist almost entirely of mutton and beef. Lamb has for some time been practically unobtainable. It is almost impossible to forecast the future of the market. The recent drought in Australia must curtail supplies, and there is a demand for imported meat, more particularly beef, on the Continent. Against this trade is bad throughout the country, and although the demand for frozen meat has considerably increased, the purchasing powers of the public are lessening daily owing to the thousands of unemployed throughout the United Kingdom. All produce is

falling, and the public are determined to bring the prices of every commodity down to what are considered reasonable."

The London Produce Company Limited (Supplies Rapidly Absorbed), 21st December, 1920:—"There is little alteration in the position with regard to supplies of New Zealand and Australian mutton and lamb. Supplies released by the Government are absorbed as soon as available, most buyers accepting any quality or description. Australian or New Zealand, that is offered. Lamb is short and will be, but mutton should be available in larger quantities very soon. 'Free' Australian new season lamb is now on the water, and parcels are being offered at 1s. 1d. per lb., the maximum price. This week (Christmas) the demand is for best quality meat, whether frozen or home-killed."

The New Zealand Loan and Mercantile Agency Company Limited (Small C.I.F. Dealings), 22nd December, 1920:—"Good progress has been made with sales of the mutton and lamb on Government account, and supplies are being placed as soon as released by the Ministry of Food. A certain amount of business has been put through on c.i.f. terms in Australian and New Zealand lamb Dec.-Jan. shipment at 1s. and 1s. 1d. per lb., but the trade generally shows little inclination to operate forward in mutton."

Australian and New Zealand Produce in London.

LONDON, 23rd December, 1920.

Canned Meats.

There is very little change to record in the position of the canned meat market here since the despatch of my last London letter. Generally speaking business is very slow, owing perhaps more to the desire on the part of buyers not to buy more than is absolutely necessary owing to financial difficulties.

Referring to the meats in general.—The market is overstocked for corned beef. Goods are being offered as low as 42s., being sound useful beef, and I have heard of some selling at 37s. Nominal value of best Australian packs to-day is about 60s. to 65s. per dozen, but any important buyer would probably not have any difficulty in filling orders for big quantities at very much lower prices.

The situation in corned mutton shows a slight improvement. Stocks are not now too heavy, and supplies are likely to be quite limited before long. At the present moment quotations are 65s. to 68s., and I anticipate a slight improvement, probably up to 70s. to 72s., although the low rates ruling for beef will doubtless prevent any serious advance in the price of mutton.

Boiled beef is in fairly ample supply, with a comparatively limited demand; the nominal price is 65s. per dozen. Boiled mutton is in short supply, and is inquired for. There are small quantities about in taper tins, which do not meet with the general approval of the trade, and these are a difficult sale at 67s. or 68s. Round tins, of which the market is bare at the moment, would find ready purchasers at from 72s. to 74s.

Ox and sheep tongues are in short supply, and are needed. Ox tongues would be worth about 3s. per lb. if really good packs. Anything specially good might make about 3s. 4d. Sheep tongues are about 18s. to 20s. for nominal 1's. and 22s. to 24s. for full weight 1's.

Extract of meat is still a slow sale, with the top price about 3s. 6d., and underpriced goods at all sorts of figures, from 1s. 6d. per lb. upwards.

The Butter Market.

Supplies during the past month have been in bigger compass, and with the prospects ahead the distribution of Government butter made early this month has been based on an increased ration of 2 ozs. per head per week. The controlled price remains at 336s. per cwt., wholesale, retailing at the fixed price of 2s. 4d. per lb. The demand from the public at this price is not sufficient to absorb the additional quantity allowed at the moment. Owing to the trade not being in a position to avail itself of the full allotment of Government butter the Irish market demand has fallen off considerably. Present prices, wholesale, range from 37s. to 44s. per cwt., and Irish unsalted is obtainable in the shops at 4s. per lb. Danish butter has been bought on British account at 296s. per cwt. Irish supplies will be stopped for some time, it is generally expected, as export permits have been withdrawn.

Pelts.

Demand for both Australian and New Zealand pelts during the past month has been practically absent, and prices have continued

to decline. The values of Australian pelts seem likely to touch a point where the better grades only will pay for pickling and freight. There are no buyers for the large stocks in London; the imports this year total 1902 casks.

Tallow.

The tallow market since I last reported has been on the quiet side, with prices moving slowly in buyers' favour. Home consumers have continued uninterested, but some demand on Continental account for medium and inferior sorts stiffened values early in December. This inquiry has now ceased, however, and the recovery lost. Present prices are as follows:—Fine mutton 58s. 6d.; good to fair, 54s. to 58s.; dull to dark, 42s. to 50s.; hard, 58s.; fine beef, 60s.; good to fair, 50s. to 58s.; dull to dark, 42s. to 45s.; sweet, 70s.

Hides.

The past month has been another dull one so far as trading in hides is concerned, and prices show a downward tendency. The stocks of leather in the country are enormous, and there is no sign of any improvement in the market. The outlook for Australian hides is therefore very unfavourable, and the market continues depressed. Some little business is reported on c.i.f. terms for dry-salted, but generally speaking little interest is being shown by buyers. Drysalted Meat Works are nominally priced at 1s.; butchers at 11d. per lb. c.i.f.

Basils.

A little export business has been done in Australian basils since the despatch of my last London letter, of the common and inferior qualities, but prices have had to be very low to secure the trading. Medium and better qualities continue to be neglected; in fact, the situation is, if anything, quieter and weaker than a month ago.

Schools in North Queensland.

An appeal is being made by the Bishop of North Queensland to all those who desire to forward the best interests of that part of Australia to assist the funds of a number of boarding schools that have been established by the Church of England in Townsville, Herberton, and Charters Towers, with the object of providing the best kind of secondary education for boys and girls at the lowest possible fees.

The girls' school at Townsville cost £5000, and has 75 boarders and 100 day scholars, fees £44 per annum. The girls' school at Herberton cost £6000, and has 83 boarders, and fees £60, and another school for girls at Charters Towers, to be opened this month, cost £2600. A boys' school at Charters Towers, being a memorial to the men of North Queensland who fell in the war, and which has cost £11,000, is also to be opened this month. It already has 63 boarders, and the fees are £50 per annum. The total expenditure has thus been £24,600, and the total amount raised so far is £17,600. The Bishop, in his appeal, says:—"This work is so urgently necessary that I have felt justified in facing a considerable overdraft rather than raise fees or refuse to take in scholars.

"The staffs of the schools—which contain many men and women of high academic attainments—are working for the most part for merely nominal salaries. The examination results have been very good, and the success in sports remarkable. Only by rigid economy and hard work have we reached the present results, and the need for expansion is still great. I therefore appeal with confidence to those who desire to forward the best interests of North Queensland to assist the funds of these schools."

Australian Population.

ARRIVALS OVERSEA.

—	N.S.W.	Vict.	Qld.	S.A.	N. Terr.	W.A.	Tas.	Total Cwth.
Total for 1918	26,217	4,695	1,432	393	205	1,117	2	34,061
Total for 1919	39,334	8,762	1,866	2,745	79	4,449	5	57,240
Total for 1920	65,892	16,862	4,014	3,570	84	6,409	13	96,844
1920.								
December ...	5,137	1,577	351	349	1	523	11	7,949

DEPARTURES OVERSEA.

—	N.S.W.	Vict.	Qld.	S.A.	N. Terr.	W.A.	Tas.	Total Cwth.
Total for 1918	26,127	4,379	1,866	387	81	1,312	15	34,167
Total for 1919	45,278	7,548	1,701	1,235	244	2,772	20	58,798
Total for 1920	65,773	12,296	3,783	2,202	194	3,946	31	88,225
1920.								
December ...	4,816	1,074	278	202	8	283	—	6,660

Judge Goodyear 30 x 3½ Tyres solely by the cost-per-mile



"I have this day handed to Messrs. Turpie and Gillespie for repair, owing to a stone piercing same, a 30 x 3½ Goodyear All-Weather Tread Tyre which has travelled over 16,000 miles. This is its first time off the back wheel of my car, which has very heavy service to perform in my shire work. The cover appears to be good for several thousand miles yet. It has seen out several other makes of covers, and has convinced me of the good value of Goodyears. I attribute its long life to: (a) its quality, (b) proper care in inflation."

G. W. C. VENABLES, C.E.W.V.I.E.,
Shire Engineer, East Loddon, Serpentine, Victoria.

THE value of anything that is judged by service—anything that wears "out"—can be easily found.

About such an article there is no element of sentiment. There is no question of "fashion" or of taste. It is just a matter of return of service.

But, in the case of a motor tyre, there is a secondary qualification besides Length of Service. There is Quality of Service. The first means Economy. The second, the conditions under which that economy is produced, such as comfort, reliability and safety.

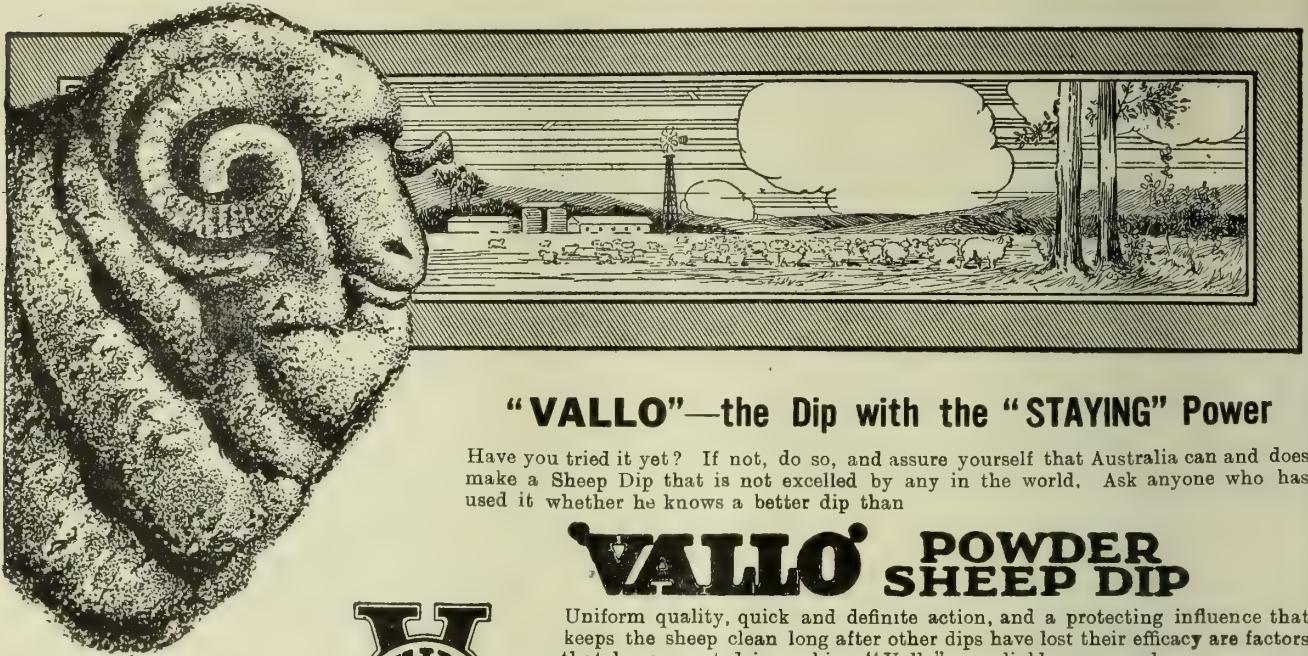
The case for the Goodyear 30 x 3½ All-Weather Tread Tyre is based not on claim but on performance—Service. The above testimonial is yet another evidence why Goodyear Tyres are cheap, judged by the one proper standard—cost-per-mile.

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Have you tried it yet? If not, do so, and assure yourself that Australia can and does make a Sheep Dip that is not excelled by any in the world. Ask anyone who has used it whether he knows a better dip than

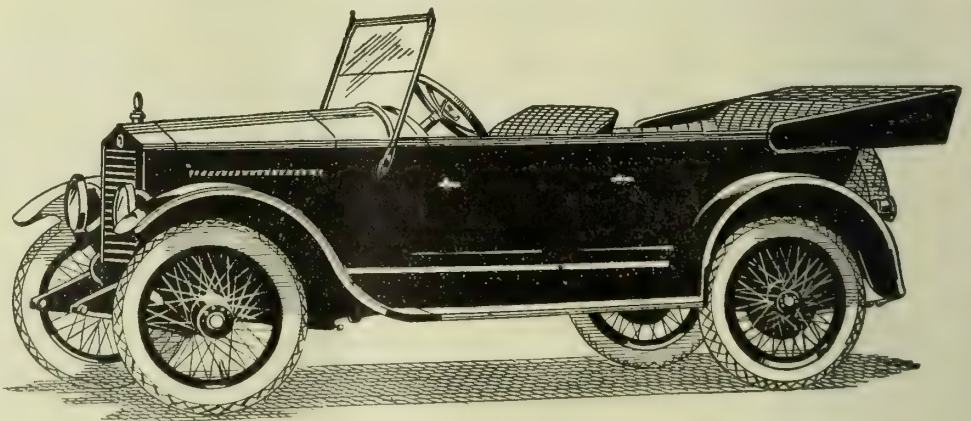
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A. VICTOR LEGGO & CO.
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STUD STOCK SUPPLEMENT.



PRICE TO STUD STOCK ADVERTISERS
It is our rule to publish "THE PASTORAL REVIEW" on the 16th of the month, it is necessary that all alterations for the Stud Stock advertisements must be in the printers' hands earlier than the 6th of each month.

Index to Stud Stock Advertisements.
SHEEP.

Table with 2 columns: Name and Page Number. Includes entries for Co., Warrah, N.S.W., L. & F. Co. Ltd., Barratta, N.S.W., Wanganella Co. Ltd., N.S.W., Estate late F. E., Bundemar, N.S.W., Ma Stud, N.S.W., y, A., Cassilis, N.S.W., wie Stud, S.A., an Stud, N.S.W., as & Co., Henry, Lucernedale, S.A., as, H. Melvin, Lamara, S.A., as, Maurice, Mallett, S.A., as & Sons, John, Collinsville, S.A., on, Murray, Wirra Wirra, S.A., Estate C. Hedley, Burrawang, N.S.W., nfull, A. L., Springfield, N.S.W., ner, Franc B.S., Haddon Rig, N.S.W., ner & Sons Ltd., F. S., Boonoke, N.S.W., ner & Sons Ltd., F. S., Wanganella Estate, N.S.W., on, Estate Jas., Bellevue, Tasmania, ker, E. W., East Bungaree, S.A., ker, H. C. and R. M., Bungaree, S.A., ker, M. S., North Bungaree, S.A., ker, Walter, Anama, S.A., r Bros., Mumblebone, N.S.W., r & Son, H. E., Egelabra, N.S.W., n, W. W., Merribee, N.S.W., noona Stud, S.A., Bros., Victoria Downs, Q., arlane, Allan, Wellington Lodge, S.A., e-Brown, A. R., Gundary Plains, N.S.W., aster, F. D., Dalkeith, N.S.W., ose, G. R. and A., Rosebank, S.A., ar, T., Denilquin Stud Park North, N.S.W., (Uardry) Ltd., Chas., Uardry, N.S.W., ray, Alick J., Mt. Crawford, S.A., ray Bros., Rhine Park, S.A., ray, Walter S., Cappeedee, S.A., er, Estate late W., Zara, N.S.W., se & Sons, T. H., The Gums, S.A., herford, Norman, Mendip Hills, N.Z., land, Thos., Koo-owie, S.A., ger, C. D., South Wangamong, N.S.W.

MERINO (continued).

Table with 2 columns: Name and Page Number. Includes entries for Sowers, K. P. P., Sheoak Hills, S.A., Sloane & Sons, James, Mulwa, N.S.W., Stirling, E. C. and J. L., Nalpa, S.A., Stuart, G., Goolgumbula, N.S.W., Suttor, H. C., Brucedale & Curranyalpa, N.S.W., Wangamong Pastoral Co., N.S.W., Willandra Pastoral Co. Ltd., Willandra, N.S.W., ROMNEY MARSH—, Cuningham, J. W., Willigobung, N.S.W., Dering, Sir H. E., Surenden-Dering Flock, Eng., Finn, Arthur, Westbroke, England, Greensted, H. T., Hoaden Court, Eng., Kent or Romney Marsh Sheep Breeders' Association, Millen, O. C., Adisham Court, England, Miskin, W., Hoo, Eng., N.Z. Romney Marsh Sheep Breeders' Association, Osborne, Pat., Willeroo, N.S.W., Osborne, S. M., Bolaro, N.S.W., Perry, W., Penrose, N.Z., Quesled, J. Egerton, Cheriton, England, Sautelle, J. B., Hilstead, N.S.W., Strouts, R. S., Singleton, Eng., Stevens, Ashley, Luddenham Court, England, Taylor, E. G., Nash Court, England, IDEALS—, Wattenhall & Sons, H. H., Victoria, SOUTHDOWN—, Fairweather, E. C., England, Fitzgerald, Lady, Buckland, England, Southdown Sheep Society, England, Stride & Son, Chichester, England, LINCOLNS—, Harris, R. S., Barragan, N.S.W., Nicholson, C., Horkotow, England, Perry, W., Penrose, N.Z., Suttor, H. C., Brucedale, N.S.W., CORRIEDALES—, Beattie, J. A., Gisborne Park, Vic., Ensor, C. H., White Rock, N.Z., Ensor, Hugh, Rakahuri, N.Z., Greenwood, G. D., Teviotdale, N.Z., Guthrie, J. F., Corriedale Park, N.S.W., Hay & Son, H., Collendina, N.S.W., Johnstone, J. A., Bushey Park, N.Z., Macfarlane Bros., Wairoa, N.S.W., Macfarlane, D., Eurella, N.S.W., Mackintosh, Wm., White Rock Mains, N.Z., Nicolson, Norman, Streanshalh, Tas., N.Z. & A.L. Co., Moeraki and Hakataramea, N.Z., Sloan, John A., Wyambah, N.S.W., LEICESTERS—, Beattie, J. A., Gisborne Park, Victoria, Falkiner, B. S., Groongal, N.S.W.

SUNDRY BRITISH BREEDS—

Table with 2 columns: Name and Page Number. Includes entries for Hobbs, C. H., Ryelands, England, Oliver & Son, A., Hawick, N.B., Cheviots, Ryeland Sheep Society, England, South Devon Sheep Society, England, Stillgoe, Hugh, Oxford Down, England, Suffolk Sheep Society, England.

CATTLE.

SHORTHORNS—

Table with 2 columns: Name and Page Number. Includes entries for Archer Bros. Ltd., Gracemere and Torsdale, Q., Bowman, A. R. & F., Grampian Hills, N.S.W., Campbell, Colin, Jerula, N.S.W., Dalziel Bros., Blair Athol, N.Z., Dangar, R. R., Mooki Springs, N.S.W., Fairweather, E. C., England, Falkiner, B. S., Groongal, N.S.W., Field, R. C., Westfield, Tas., Harris, R. S., Barragan, N.S.W., Hay & Son, Henry, Collendina, N.S.W., Hobbs, C. H., Oldport, England, Horder, Anthony, Milton Park, N.S.W., Jones, Lloyd, Hambledon Hill, N.S.W., Lord Bros., Victoria Downs, Q., McDougall, C. E., Lyndhurst, Dulacca West and Murweh, Q., McFarlane, Allan, Wellington Lodge, S.A., McMaster, J., Binnia Downs, N.S.W., Simpson, A. J., Clifton, Victoria, Simson, Roy, Nyngay, N.S.W., Suttor, H. C., Brucedale and Curranyalpa, N.S.W., Whitney Past. Co., Coomberg Park, N.S.W.

HEREFORD—

Table with 2 columns: Name and Page Number. Includes entries for Archer Bros. Ltd., Gracemere and Torsdale, Q., Beattie, J. A., Gisborne Park, Vic., Cottrell, Sir J. R. C., Garnons, England, Curtis, H. W., Abbey Green, N.S.W., Gibson, Estate Jas., Belle Vue, Tas., Harris, A. L., Condell Park, N.S.W., Hickman & Co., A. J., Eng., Hill, Mrs. C. Lumley, Bellevue, Q., Hinckes, Capt. R. T., Mansel Court, Eng., McConnel, Edgar C., Cressbrook, Q., Moore, F., Bushy Park, N.Z., Reynolds, Exors. F., Tocal, N.S.W., Reynolds, Percy, Hobartville, N.S.W., Reynolds, S., Duninald, N.S.W., Rylie, Estate A., Micalago, N.S.W., Sparkes, Jas., Lyndley, Q., Tindal and Son, Gunyan, Q., Tindal, C. H., Ramornie, N.S.W., Waddell, H. H., Benvenue, Q., White, Exors. late R. W., Harben Vale, N.S.W.

RED POLLED—

Table with 2 columns: Name and Page Number. Includes entries for Archer Bros. Ltd., Gracemere, Q., Greensted, H. T., Hoaden Court, Eng., Guthrie, J. F., Corriedale Park, N.S.W., Quesled, J. E., Cheriton, Eng.

DEVON—

Table with 2 columns: Name and Page Number. Includes entries for Curtis, H. W., Abbey Green, N.S.W., Devon Cattle Breeders' Society, Eng.

VARIOUS—

Table with 2 columns: Name and Page Number. Includes entries for Carlyon, A. S. G., Gwavas, N.Z. (Aberdeen-Angus), Clark, G. C., East Talgai, Q. (Polled Angus), Fairweather, E. C., England (Sussex Beef), Knight, J. F., Cannobie Lea, N.Z. (Aberdeen-Angus), White Bros., Edinglassie, N.S.W. (Polled Angus).

HORSES.

Table with 2 columns: Name and Page Number. Includes entries for Dangar, Mrs. M. P., Baroona, N.S.W., Fairweather, E. C., England, Falkiner & Sons Ltd., F. S., Widglewa, N.S.W., Lord Bros., Victoria Downs, Q., McDougall, C. E., Lyndhurst and Murweh, Q., McFarlane, Allan, Wellington Lodge, S.A., Reynolds, Exors. F., Tocal, N.S.W., Reynolds, P., Hobartville, N.S.W., Thomson & Co., Wairongoa, N.Z.

SWINE.

Table with 2 columns: Name and Page Number. Includes entries for Fairweather, E. C., England, Harris, A. L., Condell Park, N.S.W., Harris, R. S., Barragan, N.S.W.

BAROONA SUFFOLK PUNCHES

Known all over Australia. Colts rising 3 years for sale.
Apply:—The Manager, BAROONA, WHITTINGHAM, N.S.W.



BAWDSEY VOLUNTEER.
Bred by Sir Cuthbert Quilter, Bart., M.P.
Champion Royal Sydney Show, 1913.

PASTORAL AGENCY COY., HUGHENDEN

STOCK and STATION AGENTS
(NORTH QUEENSLAND)

WE ARE IN CLOSE TOUCH WITH ALL NORTHERN OWNERS,
AND BUYERS REQUIRING SHEEP OR CATTLE PROPERTIES
IN NORTH QUEENSLAND SHOULD COMMUNICATE WITH US
PROMPTLY.

EXPORTER of PEDIGREE STOCK to all Parts of the World EDWARD SMITH,

107 Bransford Road ————— Worcester, England,

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All Classes of HORSES, CATTLE, SHEEP and PIGS for BREEDING
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N.B.—Shorthorn and Hereford Cattle, Ryeland and Border Leicester Sheep a speciality

SHIPPING and INSURANCE arranged to every part
of Australia and New Zealand at lowest rates.

SECRETARY to the RYELAND FLOCK BOOK SOCIETY, which is
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of fat lambs.

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We Specialise in all Stud Stock.

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STOCK FOR PRIVATE SALE. PROPERTIES, FARMS to PASTORAL ESTATES.
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**Stock, Station, Land and Financial Agents,
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Our Principals personally attend to all Stock consigned to them.

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we hold many Records, are
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*To send us your draft for the next
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In touch with All Leading Breeders, and can supply Any Breed of Sheep or Cattle.

Write BADGERY BROTHERS LTD.

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THE BUNGAREE STUD

Stud
and
Flock
Rams
for
Sale

Stud
and
Flock
Rams
for
Sale



BUNGAREE SPECIAL STUD RAM, No. 32.

For particulars apply:—

H. C. & R. M. HAWKER,

Bungaree—Clare—South Australia

EAST BUNGAREE MERINOS

South Australia.



2-year-old Stud Ram 250.

Grazed on natural grasses only.

PURE bred by E. W. Hawker since 1906 from his share of the original Bungaree Stud and Flock, the oldest combing Merino flock in South Australia.

The **EAST BUNGAREE** sheep are large framed, plain bodied, with splendid constitutions and are well covered with long robust wool showing plenty of character.

In October 1909 the **EAST BUNGAREE** wool topped the Adelaide market, and has consistently brought high prices ever since.

In 1917, 18 bales of **A A E** were appraised at $25\frac{1}{2}$ d. ; nine bales of **B B E** at $24\frac{1}{2}$ d. 14 bales of **A H A E** at $23\frac{1}{2}$ d.

For particulars of Stud and Flock Rams and Ewes for sale apply to—

EDWARD W. HAWKER, East Bungaree, Clare, South Australia

Or to the Manager.

Telegrams—East Bungaree, Clare, S.A.

Telephone—East Bungaree, Clare, S.A.

NORTH BUNGAREE MERINOS

"NORTH BUNGAREE" is the Northern portion of the original "Bungaree" run, and was taken over by Mr. M. S. Hawker with his share of the Bungaree Stud and general Flock Merinos in 1906.



4-year-old Special Stud Ram, No. 1. The property of M. S. Hawker, North Bungaree.

THE "NORTH BUNGAREE" MERINOS retain all the characteristics of the original "Bungaree" Flock (founded by the late Hon. G. C. Hawker in 1841), viz.: Size, Constitution, Length of Staple and Weight of Fleece.—1917 clip realised up to 25½d., one line of 60 bales making 23½d.

Inquiries for Rams to be addressed to

the Manager, North Bungaree, Yacka, Sth. Aust.

Telegrams: North Bungaree, Clare, S.A.

Telephone: Clare, S.A.

THE ANAMA STUD

Bred by **WALTER HAWKER**, at **ANAMA**
(Central Bungaree), South Australia.



Special Stud Ram, "Progress" (4 years) by "Perfection 1—Miss Togo.
Bred by Walter Hawker.

The Anama Merino Flock was established in 1841 by the late G. C. Hawker at Bungaree, and is noted for producing sheep of great constitution and size, being plain-bodied with very valuable fleeces of long combing wool of robust type.

Orders for stud and flock rams booked through The Manager, ANAMA STATION, Clare, South Australia.

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Telegrams and Telephone—Clare.
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All rams and ewes classed by Mr. H. C. Pennefather.



Special Stud Ewe, "Lady Togo." Cut 20 lbs. 1 oz. wool; Height—Shoulder, 2 ft. 8 in.; Rump, 2 ft. 9 in.; Girth, 5 ft. 9 in.; Length, 3 ft. 11 in. Bred by Walter Hawker.

Bred by **WALTER HAWKER**, Anama, Clare, South Australia

SHEAOAK HILLS STUD MERINOS

The property of K. P. P. Sawers.



DAN 5.

These big framed, plain bodied, vigorous constitutioned sheep are grazed on natural grasses only, in a 12½ inch rainfall, and have proved themselves under both adverse and favourable conditions in all parts of the Commonwealth and in South Africa



WOOLSCOUR 8.

For particulars of Stud and Flock Rams and Ewes, apply to any Live Stock Agents, Adelaide, or to—

Telegrams: Sheoak, Yarcowie.
Telephone No. 1 Yarcowie

K. P. P. SAWERS, Sheoak Hills,
Whyte Yarcowie, South Australia.

NOW BOOKING.

Collinsville Stud



"Dinkum," Aged 2 years and 2 months. Grand Champion Strong Wool Merino Ram (Unhoused) Sheepbreeders' Show, Sydney, July 1920.



"Broad Charles," Grand Champion Merino Ram (Unhoused) at N.S.W. Sheepbreeders' Show, Sydney, July 1919.



3 Champion Ewes. 1½ years (unhoused) Sheepbreeders' Show, Sydney, 1920.
Left to right—Reserve Champion, Grand Champion, Champion Strong Wool.



Grand Champion Merino Ewe (Unhoused) at N.S.W. Sheepbreeders' Show, Sydney, July 1919.



Grand Champion Merino Ewe, 1½ years (Unhoused) Sheepbreeders' Show, Sydney, July 1920

WE ARE ALL CHAMPIONS.

Bred by and the property of
JOHN COLLINS & SONS, Collinsville, via Hallett, South Australia.
To whom apply for particulars for Flock and Stud Rams.

Telegrams: Collinsville, Mt. Bryan

MALLET STUD MERINOS.

This stud was founded by the purchase of 1 ram and 60 ewes from some of the leading studs of New South Wales (pure Peppin blood) for the total sum of 5555 guineas, which at the time was most probably a world's record price for any one breeder to have paid for this number of sheep on which to found a stud.

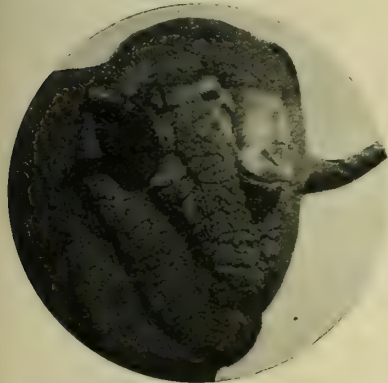


Pen of five Ewes. An offer of 900 guineas made and refused.

Stud ewes have already been sold up to 275 guineas. Stud rams cut to 34½ lbs. and ewes up to 22 lbs. of beautiful quality wool.

Large frames, plain bodies, with a covering of exceptional length and quality.

Bred and grown on a country with an average rainfall of 9 inches.



Head of Stud Ram.



"PRINCE CHARLIE," 3½ years. Cost 3000 guineas. Leased to a leading South Australian Stud for one month for 1000 guineas, being probably a world's record. Sire "Lord Charles," sold for 2000 guineas, and the grand sire "Sir Charles," sold for 1000 gns.



Heads of Stud Ewes.



Group of eleven Ewes. Cost 100 guineas each.



Typical Flock Rams. Used to breed Flock Sale Rams.



"NONSUCH," Mallett Stud Ewe, for which an offer of 200 guineas has been made and refused.



"ADDITION," 2 years, by "Dandie Dinmont." Purchased for 1200 guineas.



"DANDIE AGAIN," 3 years, by "Dandie Dinmont." Purchased for 1000 guineas.

For particulars of Stud and Flock Rams apply to

MAURICE COLLINS, Mallett, or Abberton Park, Aberdeen, South Australia.

Telephone 14 Terowie, or 74 Koorlinga.

LUCERNEDALE STUD

"The Wanganella of South Australia"

MERINOS

Stud & Flock
Rams
for Sale.



"DESTINY"—Sold to Mr. A. Luckoff, Graft Reinet S.A., for 1,500 gns., July, 1919.



Special Stud Ram "HERO," bought by Mr. W. J. McCarthy for Mr. F. W. Southey, S.A., for 1,600 gns., August, 1919.



"LOYALTY," 3 years. Sold Nov., 1919, to Messrs. J. & A. Hay, The Glen, Harrowgate, for 2,100 gns. Shorn Aug. 8th, 1919, photographed April 5th, 1920, therefore carrying 8 months' wool when this picture was taken.



"MARSHAL FOCH"—2½ years. Special Stud Ram, pure Peppin blood, cut 33½ lbs. wool. Sold to Mr. Paul J. du Plessis, for 1,200 gns.



"DANDIE AGAIN," 5 years. Sold to Mr. Maurice Collins of Hallett, for use in conjunction with his 3,000 gns. Ram, "Prince Charlie."



The above are pictures of some of the high-priced Sheep sold by us during Season 1919. Amongst the successful breeders who have purchased Rams from Lucernedale are the Wanganella Proprietors, N.S.W.

For particulars apply—

Henry Collins & Co., Lucernedale, Mt. Bryan, South Australia.

PHONE—3 Mt. Bryan.

TELEGRAMS—Mt. Bryan.

MOUNT CRAWFORD MURRAY MERINO STUD



CHAMPION RAM LION II.

Grazed at large on Naturalised Grasses only and not Lucerne
Bred by and the property of ALICK J. MURRAY, Mount Crawford, South Australia

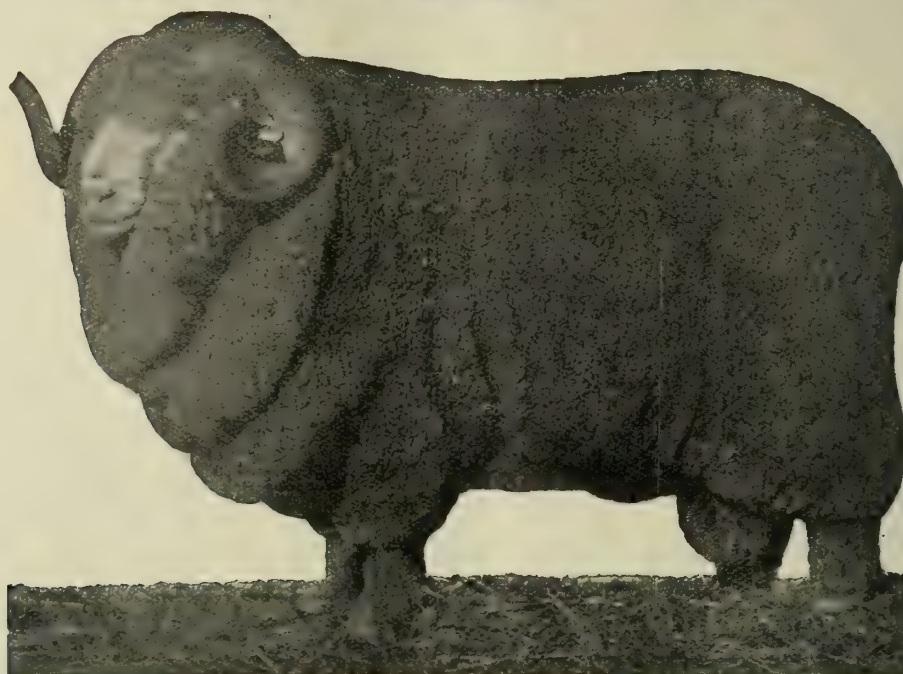
— THE MURRAY MERINO FLOCK —
was founded by the late JOHN MURRAY in 1843.

MURRAY Merinos have been INBRED for seventy-one years, and are famous throughout Australia,
New Zealand, and South Africa for their robust constitution, large symmetrical frames,
and heavy fleeces of profitable wool.

FULL PARTICULARS CAN BE OBTAINED FROM—
ALICK J. MURRAY, Mt. Crawford, South Australia.

Rhine Park —and— Cappeedee

MURRAY MERINO STUDS.



RHINE PARK RAM.

Champion at Adelaide, 1913. 3 years old. Cut fleece 29½ lbs.

THE MURRAY MERINO FLOCK was founded by the late JOHN MURRAY in 1843.

The MURRAY MERINOS have been INBRED for seventy-one years, and are famous throughout Australia, New Zealand, and South Africa for their robust constitution, large symmetrical frames, and heavy fleeces of profitable wool. These Sheep are grazed at large on naturalised grasses only.



2 YEAR OLD CAPPEEDEE STUD RAM, HAIG.

For full particulars apply

MURRAY BROS., Rhine Park, Eden Valley, South Australia
and
WALTER S. MURRAY, Cappeedee, Hallett, South Australia

KOO-OWIE STUD MERINOS

The property of THOS. SANDLAND, Koo-owie, South Australia.

Stud and
Flock
Rams
for Sale.



Stud and
Flock
Rams
for Sale.

Leading Sire "BEATTY."

These sheep have been bred for 30 years in a 15 inch rainfall and are noted for their high cutting value per fleece of long, bold combing wool and carry valuable fleeces into age. Plain bodied, big sheep and great movers.

For particulars apply to —

K. Chester Sandland, Koo-owie, Kooringa, South Australia.

CANOWIE STUD

The Stud was established in 1857. Rambouillet Foundation.

[12]



Sires Used
have cut
up to
37 lbs.



Stud Ewes
mated
have cut over
25 lbs.



Don Cronge, an Exhibition Ram (by Cronje). Offering Progeny 1920.

STUD AND FLOCK RAMS FOR SALE.

Flock Rams, 4 & 6 guineas. Selected Flock, 10 guineas. Stud Rams, 25 to 75 guineas. Special Studs from 100 guineas upwards.

For particulars apply—

A. G. RYMILL, Managing Director, or A. J. McDonald, Manager, Canowie.

14 Alma Chambers, Adelaide.

Cables—RYMILL, Adelaide.

Hallett, South Australia.

ROSEBANK MERINOS



SOUTH AUSTRALIA

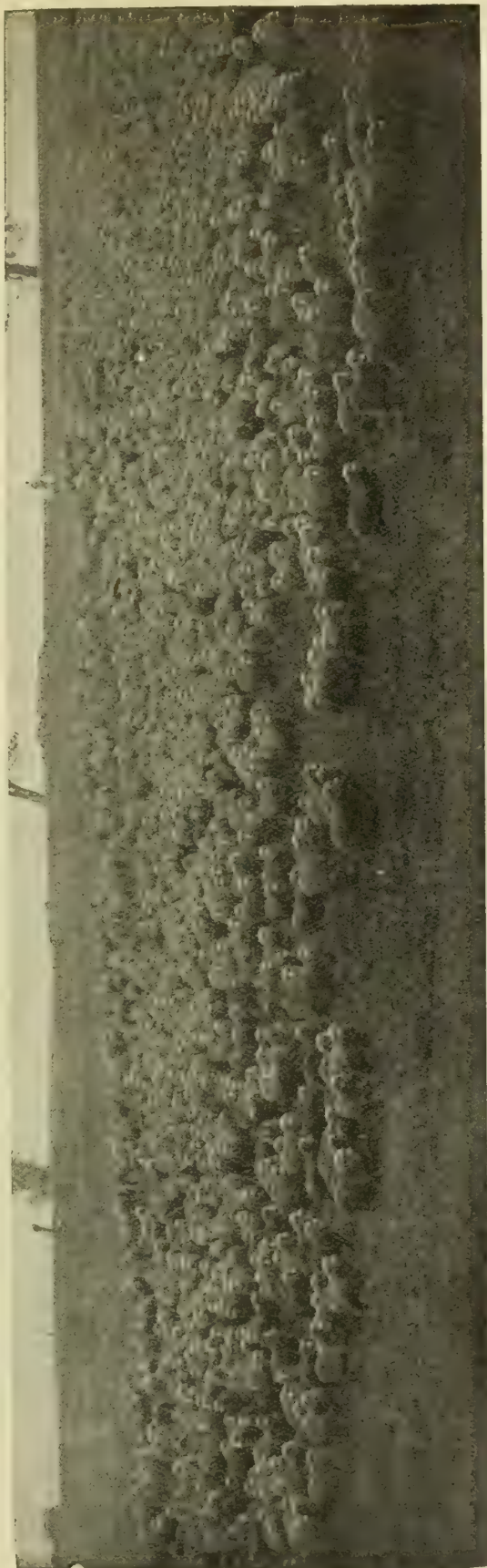
*All Melrose Sheep are grazed on
natural pastures only.*

Rosebank secured Champion for Ewe at the Adelaide Royal Show three years in succession, 1910 to 1912. Awarded to different sheep by three different judges. Also secured the whole of the First Prizes offered by the Society for Ewes in 1912.

1½ Year-Old Ewes

Cut 22½, 21, 20, 18½ lbs. of Wool, 1917.

Bred by and the property of G. R. and A. Melrose, "Rosebank," Mt. Pleasant.



6,700 Hoggets travelling to shearing shed, 1917. Averaged 11 lbs. 5 ozs. under 12 months' growth.

G. R. & A. MELROSE, "Rosebank," Mount Pleasant, S. Aust.

THE KOONOONA STUD

Large framed,
bold woolled,
grass fed, pure
Australian
Merinos.
Founded in
1883.
Quotations
given for stud,
selected and
flock rams



Special Stud Ram, "LORD KITCHENER," 3½ Years Old, by "Rajah." Cut 33 lbs. Wool.

THE KOONOONA STUD.
Burra, South Australia.

Apply:—
Koonoona
Proprietors,
Cowra
Chambers,
Adelaide;
or
W. G. HAWKES
Manager,
Koonoona,
Burra, S.A.

Burrawang Merinos

Estate of the Late C. Hedley Edols.

The Stud is classed by Mr. W. O'Brien, of Mumblebone.



¶ Since 1880 the Burrawang Flock has been maintained solely from Wanganella blood. In that year six very high-class rams were purchased from Austin and Millear. One of these, "Old Bestwool," laid the foundation, and created the present high reputation of the flock. At the same time 700 2-tooth rams were purchased from the same source, nearly all of "Premier" and "Warrior" strains, considered two of the best rams on Wanganella. In 1887 two more high-class stud rams were purchased from Wanganella; since then no other purchases have been made until 1918, when a high-class Murgha ram was purchased at a cost of 1000 guineas. Although the country has altered the type somewhat, the sheep are as strong in constitution as the Wanganellas in their home in Riverina.

¶ The Burrawang wool retains its excellent name with buyers, and is always in demand at a satisfactory range of prices.

¶ The grown sheep, comprised chiefly of breeding ewes (no wethers), averaged 12 lbs. 8 ozs. of wool 1916 clip.

For Stud or Flock Rams apply to—

The Manager, Burrawang, Yarrabandai, N.S.W.

or to

The Executors of the Late C. H. EDOLS,

c/o Perpetual Trustee Company (Limited), 33-39 HUNTER STREET, SYDNEY

H. E. KATER & SON'S EGELABRA STUD, WARREN N.S.W.



EGELABRA TWO-TOOTH STUD RAM.

The Egelabra Stud is a portion of the Mumblebone Stud, and was acquired by the present owners by the subdivision of Mumblebone in 1906. The stud was founded in 1879 by H. E. and E. H. Kater, who purchased rams and ewes from the late Hon. John Smith, of Gamboola, Molong. Since that date no fresh blood has been introduced into the flock. Mr. Smith was a noted breeder. His flock was founded about 1840 from Marsden's flock of Spanish Merinos and Negrettis, specially imported from Spain. Thus it is claimed that the Egelabra Stud has maintained for 78 years that purity of blood which is so important.

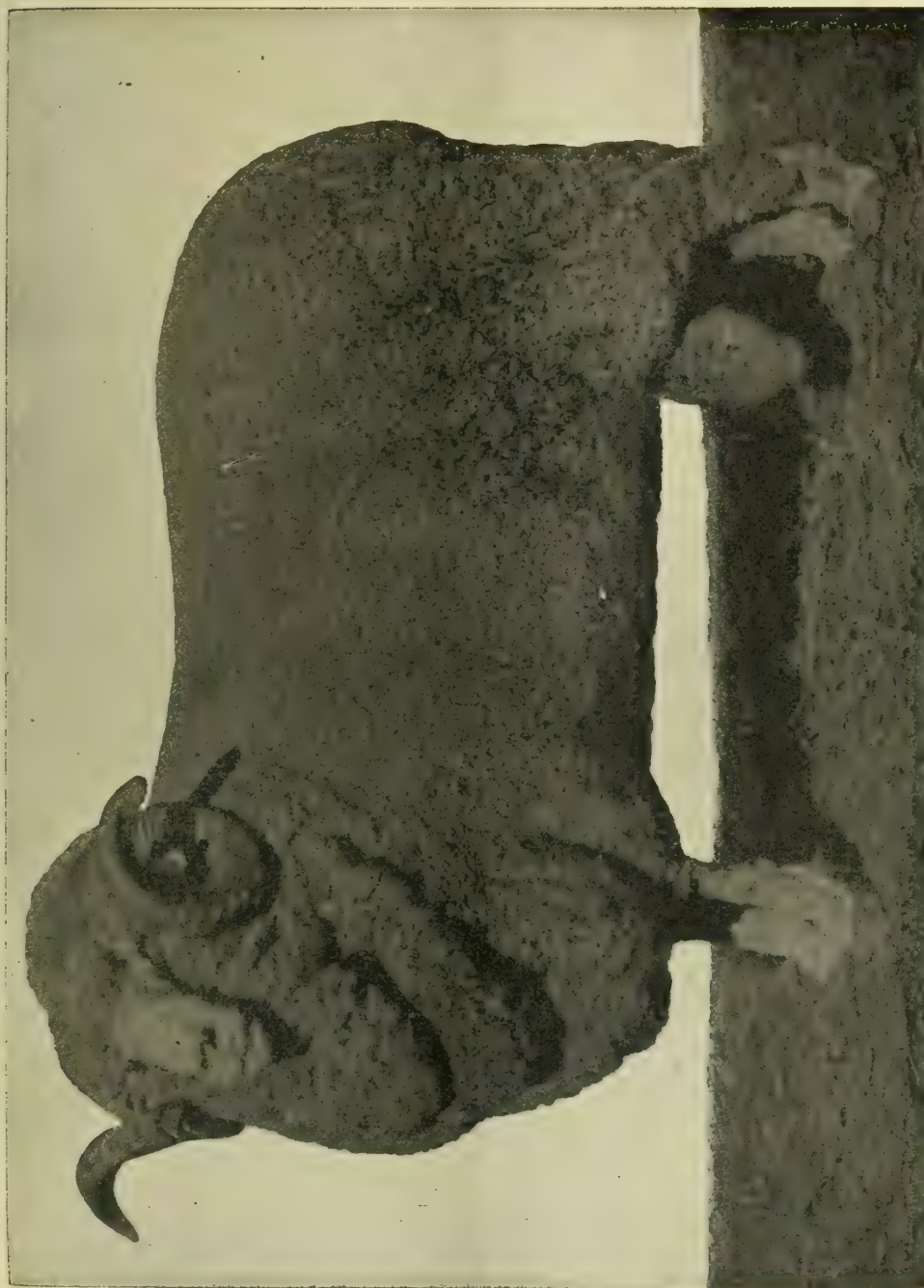
The sheep are noted for large frames, plain bodies, splendid fleeces, long staple, and magnificent constitutions. At a recent shearing the Egelabra sheep, consisting mainly of breeding ewes, cut 14 lbs. 4 ozs. of wool.

For particulars of Sale Rams apply to—

The Manager, Egelabra, Sandy Creek, Warren, N.S.W.

MUMBLEBONE STUD

Established
1879.



Bred on Western
(N.S.W.) Salt
Bush Country.
Noted for their
robust constitution,
large frames, and
splendid fleeces of
long, strong staple.

Special Stud Ram No. 319.

For particulars sale rams apply—

KATER BROTHERS, Mumblebone, Warren, N.S.W.

The WANGANELLA STUD



SPECIAL STUD RAM 17.2

Sold by Auction at the Sydney Sales, July, 1920, to Mr. Maurice Collins, of Mallett, S.A., for 700 gns. thereby obtaining the highest price at auction during the sales for two successive years by the Wanganella rams.

STUD & FLOCK RAMS FOR SALE.

For particulars apply

The Manager **AUSTIN WANGANELLA CO. LTD.**, Wanganella, Deniliquin, N.S.W.

DALKEITH MERINOS

PLAIN BODIED

PURELY GRASS-FED

BOONKE BLOOD



SIR ALICK

STUD AND FLOCK RAMS FOR SALE.

Trucking Stations—Mudgee, Merriwa, or Craboon. Rams will be delivered on trucks to suit buyer's convenience.

F. D. McMASTER, DALKEITH, CASSILIS, N.S.W.

The stud is under the personal supervision of Mr. F. D. McMaster, and was classed by the late Mr. J. C. Darke. The work in the future will be done by Mr. W. J. McCarthy.

Sir Alick, a son of Australia Day, took first prize for ram under 2 years at the Sydney Show, 1919. In 1920 he took Reserve Grand Champion and first prize and was sold to the Welbondongah Pastoral Company for 400 guineas.

Amongst the sires used are Australia Day, Comedy King, General Grant, Young Comedy King, Young Australia, and numerous other high-class Boonoke Stud Rams. Additions made to the stud in 1918 were as follows:—10 Boonoke blood special stud ewes at 110 guineas, which took second prize Sydney Show, 1918, and 1 ditto Grand Champion at same Show at 150 guineas, all purchased from Goldsbrough, Mort & Co. Ltd., Canonbar Station; 10 special stud pure Boonoke ewes at 100 guineas each, from F. S. Falkiner & Sons Ltd.

VICTORIA DOWNS STUD

MORVEN ————— QUEENSLAND



*A Queensland Stud of
pure Peppin Wanganella blood*



THE VICTORIA DOWNS MERINOS are pure Wanganella blood, being founded on rams purchased from Deniliquin Stud Park and Wanganella Estate, New South Wales, at high prices; the ewes were bought from the former property.



BRED on the downs of Western Queensland, the **VICTORIA DOWNS SHEEP** are noted for their exceptional constitutions and grow a fleece of very dense medium combing wool of good length and abundant character.

RAMS—Plain bodied, large frames, masculine, bold carriage.

EWES—Plain bodied, large frames, deep, roomy, good breeders.



CATTLE—best blood available—both sires and dams, chiefly Derrimuts, together with a number of imported females—41 pedigree females costing from 100 to 515 gns., averaging 188 gns. and 34 other pedigree cows and heifers, averaging 60 gns. The bull Clifton Cherry Colonel, purchased from A. J. Simpson for 1000 gns., is used in the Victoria Downs Stud. All Cattle Herd Book registered.

Stud and Flock Rams for Sale.

Flock, 4, 6 & 8 gns. Selected, 10 and 12 gns. Stud, from 15 gns. upwards.

Stud and Herd Bulls for Sale.

Young herd bulls from 20 gns. upwards. Young pedigree bulls from 40 gns. upwards.

For full particulars apply to—

LORD BROS., Victoria Downs, Morven, Q'land.

Deniliquin Stud Park North Stud

(PURE WANGANELLA BLOOD.)

The Property of THOMAS MILLEAR.



"DONALD DINNIE"

Bred and Sold by THOMAS MILLEAR, Deniliquin Stud Park Stud, N.S.W., through Messrs. Herbert Power and Son, to the proprietors of the CANOWIE ESTATE, South Australia. Price, 1200 Guineas.

The above photo was taken at Canowie in 1908.

Since 1906 "Donald Dinnie" has sired 1056 lambs, and an immense sum has been received by the owners for his surplus progeny. His fleece has averaged 32 lbs. for the past 10 years, and now (1915), at 12 years old, he has cut 31½ lbs. of bright, lustrous wool.

Among the rams sold have been—"Donald Dinnie" (photo above), in 1906, for 1200 gns.; "Sir William," in 1909, for 1350 gns.; "Stud Park No. 10," in 1918, for 2500 gns., this latter being a world's record for a 6-year-old pure Peppin Rambouillet.

This Stud was formed in 1892 by the father of the present owner (then managing partner in Wanganella), and the classing since 1898 has been done by the owner in conjunction with his Manager, who is now in his 24th year of service.

In June, 1919, Mr. Millear transferred his Deniliquin Stud Park property, with about 4000 stud sheep, being absolutely fair samples in each grade of the 20,000 owned by him, to his son, Thomas Millear, jun., retaining for himself the property Stud Park North, Jerilderie, N.S.W., which has been worked for many years past in conjunction with Stud Park, Deniliquin. During his son's absence from Australia Mr. Millear will carry on this latter property in the former's interests.

N.B.—The sale of Wanganella Estate by the Exors. of late Thomas Millear (of which Mr. Millear was a Trustee) does not affect the Stud Park North business, as no sheep from Stud Park North were parted with, nor did Mr. Millear acquire any from Wanganella Estate for Stud Park North, excepting prior to the sale of the Estate.

INQUIRIES FOR STOCK SHOULD BE ADDRESSED TO

THOMAS MILLEAR, Edgarley, Willaura, Victoria,

or to the MANAGER, STUD PARK NORTH, JERILDERIE, N.S.W.

HADDON RIG MERINO STUD

Pure Wanganella Rambouillet.



Haddon Rig 2-Year-old Ram, "Royal Dandie," sold to A. G. Michaelian for South Africa for 1500 guineas

A few rams of "record" quality at "reasonable" prices available each year.

FRANC B. S. FALKINER, Owner, Late Managing Director of F. S. Falkiner & Sons Ltd., 30 years Riverina experience in breeding and active station management.

Inquiries to HADDON RIG, WARREN, NEW SOUTH WALES.

THE BUNDEMAR STUD

FEB. 16, 1921.

THE PASTORAL REVIEW.

Inquiries
for
**Stud
and
Flock
Rams**
to
The Manager
BUNDEMAR
TRANGIE,
N.S.W.



**BONNIE
CHARLIE**
Sire:
Prince
Charlie
Grand Sire:
Lord Charles
G.G. Sire:
Sir Charles

BONNIE CHARLIE.

Bred by Estate late F. E. Body, Bundemar, Trangie, N.S.W. Born Nov. 1st, 1918.
Sold June 16th, 1920, to Messrs. Vermaak Bros., Stockdale, Stormberg Junction, C.P., South Africa, for Three Thousand Six Hundred Guineaes.

Also bred in the Bundemar Stud	Prince Charlie	...	...	...	Sold to M. Collins for 3000 guineas in 1918
	Lord Charles	...	...	...	H. Collins & Co. for 2000 guineas in 1915
	Sir Charles	...	...	...	D. & W. Gibb for £1000 in 1910
	2-tooth Ewe, No. C 692	...	...	...	C. Meyer, Edenburgh, S. Af., for £250 in 1920

THE WILLANDRA STUD

Property of The Willandra Pastoral Co. Ltd.
Pure Wanganella Blood.

The Willandra sheep are bred in a 14" rainfall and are entirely grass fed, possessing strong constitutions, plain bodies, with good heads and necks (which is a distinct advantage where the fly is troublesome), and long

dense fleeces of robust wool. The Willandra sheep produce a fine type of wethers, with exceptionally large frames, plain bodies, well proportioned, and most suitable carcasses for export, while at shearing yield heavy fleeces of attractive wool.



WILLANDRA STUD RAM.

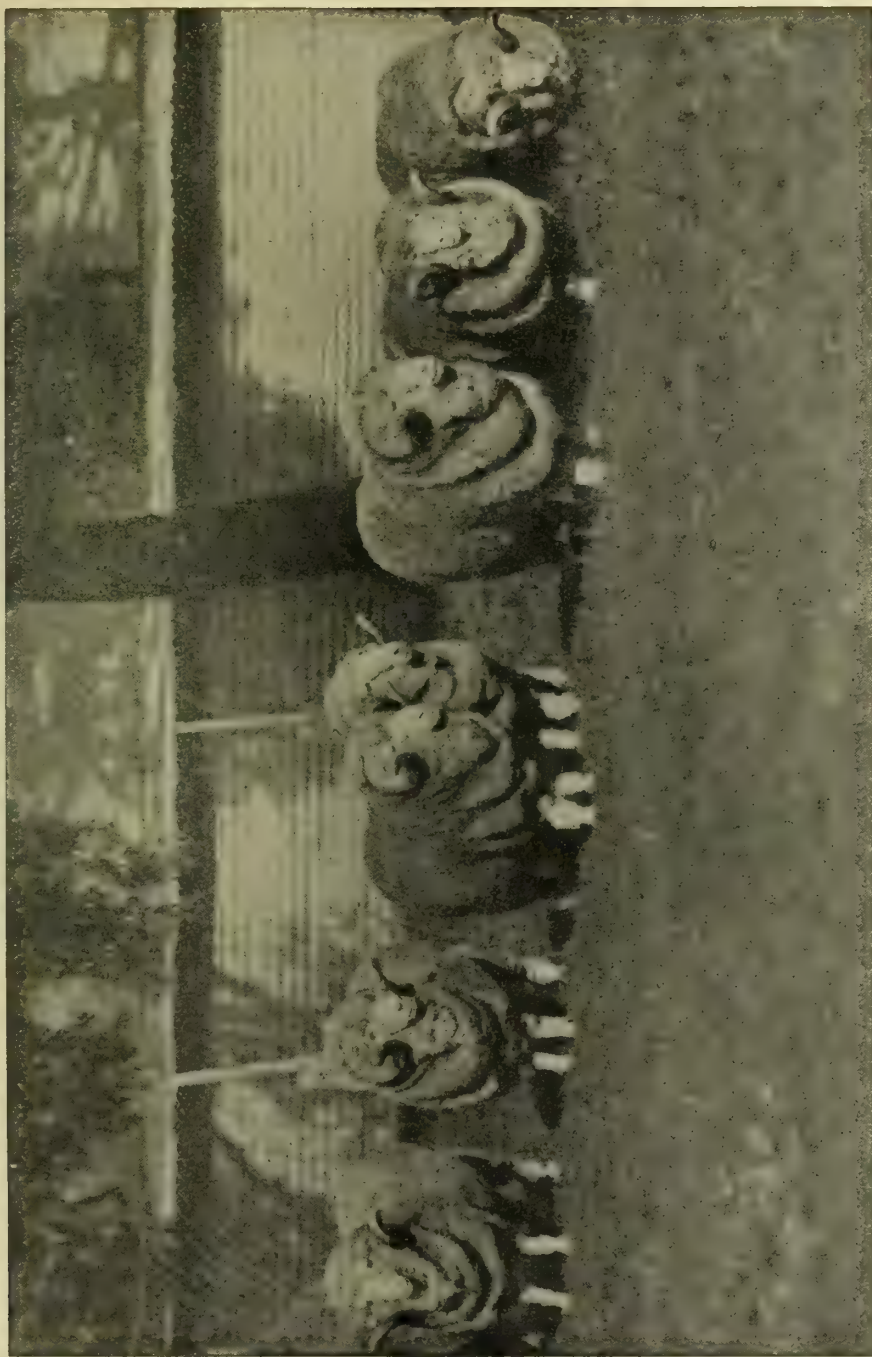
Stud Rams cut up to 35 lbs. Stud Ewes cut up to 25 lbs. Flock and Stud Rams for Sale.

For particulars apply to—The Manager, Willandra Station, Booligal.

Telegrams: Hillston. Cable Address: Acumen Sydney. A.B.C. Code, 5th Edition.

The UARDRY Stud.

PURE PEPPIN BLOOD.



Group of Seven Rams sold at Auction, Sydney, July 1918, Averaged £319 10/-

Stud and Flock Rams for Sale.

Enquiries should be addressed to:-

Charles Mills (Uardry) Limited, UARDRY, Hay, N.S.W.

Telegrams to "MILLS, Uardry, Carrathool."

WANGANELLA ESTATE STUD

Property of F. S. FALKINER & SONS Ltd.



No. 955.—OPTIMIST. 3 years old.

Sold to Dr. G. E. Goddard for 1750 guineas.

Property of F. S. Falkiner & Sons Ltd., Wanganella Estate, Conargo, N.S.W.

Large frames, plain bodies, robust wool of pronounced character, good length and colour. Numerous letters of appreciation from buyers throughout the Commonwealth and South Africa.

THIS STUD was formed by Messrs. Peppin & Sons in 1861, and purchased with the Station by Messrs. Austin & Milllear in 1878. This partnership terminated in 1894—Mr. Milllear then taking over his half of the property and stock, which he named **Wanganella Estate**, and conducted till his death in 1895. The Trustees carried on the business until August, 1910, when they sold the property, the whole of the pure bred **WANGANELLA ESTATE Stud Flock**, and the **GOODWILL** of the business to F. S. FALKINER & SONS LTD.

FLOCK and STUD RAMS for SALE, for particulars apply—

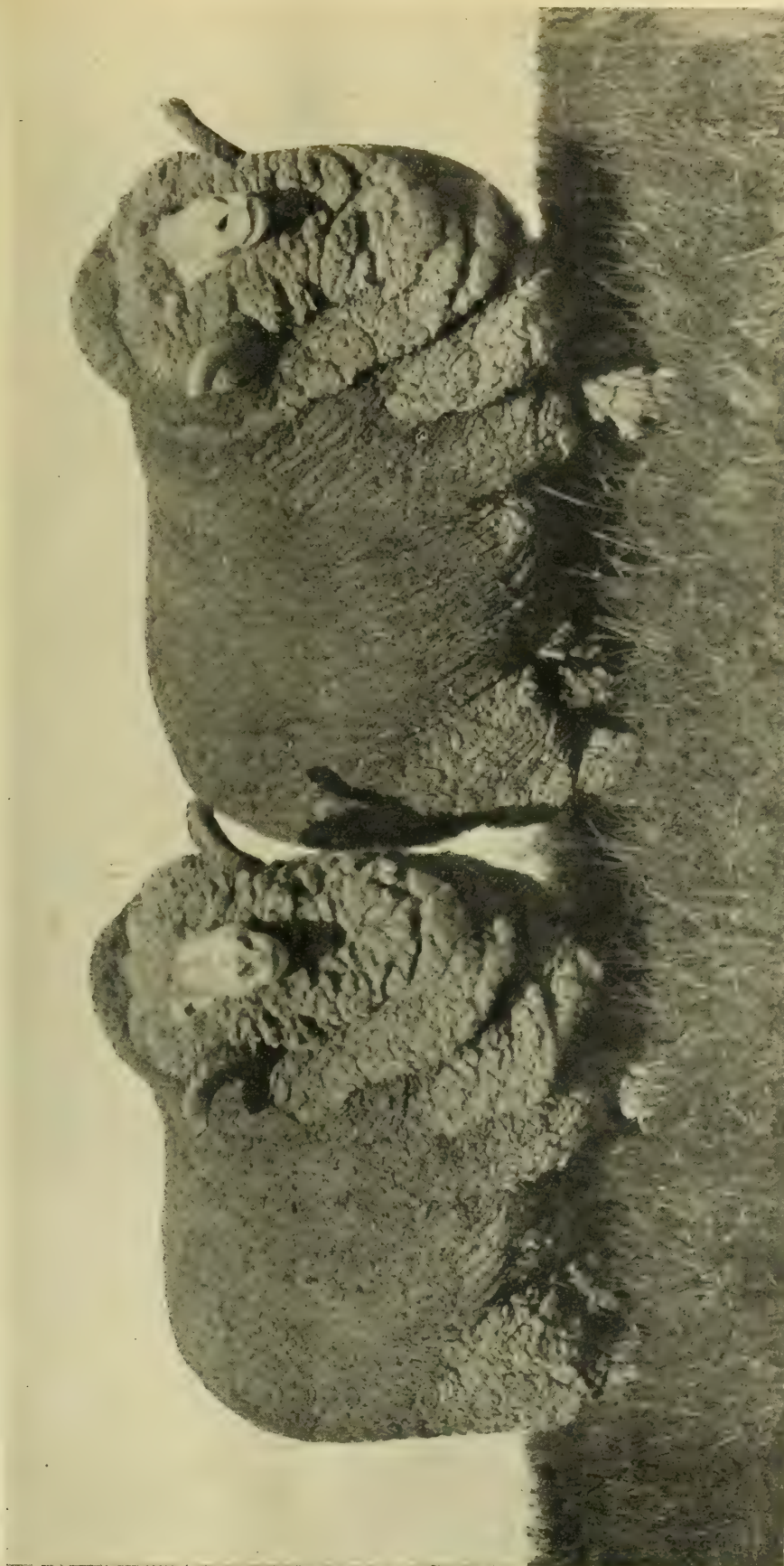
F.S.FALKINER & SONS LTD., Wanganella Estate, CONARGO, N.S.W.

BURNIMA MERINO FLOCK

A combination of the famous Murray and Koonoona blood of South Australia.

Large-framed, plain-bodied sheep, cutting heavy fleeces of high-class wool.

Pure Australian Merinos bred on sound lines. These sheep have given satisfaction wherever used.



4-tooth Stud Rams.—Two of the Leading Sires.

STUD AND FLOCK RAMS FOR SALE.

Apply to the **MANAGER, BURNIMA, BIBBENLUKE, NEW SOUTH WALES.**

Zara Merino Stud



Zara Stud Ram

**Stud
and
Flock
Rams
for
Sale**



Group of Zara Stud Rams

**Estate late
WILLIAM OFFICER—ZARA—WANGANELLA
New South Wales**

Boonoke Stud Merino Sheep.

PURE PEPPIN BLOOD.



A leading Boonoke Sire. Photo taken at 6 years old.

Bred by F. S. FALKINER & SONS LTD., Boonoke, Conargo, N.S.W.

Inquiries for Stock should be addressed to—

**F. S. FALKINER & SONS Ltd., Boonoke, Conargo, N.S.W.
or Boonoke North, Widgiewa Siding, N.S.W.**

Wangamong

(Rambouillet—Wanganella since 1863)

Stud.

FLOCK RAMS.

Sales for year 1913, including below—1258, to 28 old buyers out of 36—to all parts of Commonwealth. South Africa (7 old buyers out of 9). New Zealand, only one buyer inspected, and he took 200. 1916-17-18, 49 buyers out of 83 were old ram buyers, all but 3 left selection to breeder.

1916 RECORD.

WOOL RETURNS.

40 Years' Averages, All Sheep, 90% Ewes.

1879	All Wool in Grease	...	10½d.	5/9 per Sheep
1889	"	"	10¾d.	7/3
1899	"	"	11½d.	8/9
1909	"	"	10¾d.	9/5

{ Australian Markets. Always.				
1914	All Wool in Grease ...	11.62d.	10/5 per sheep	
1916	" "	21½d.	17/9 "	
1917	" "	19.34d.	16/4 "	
Sale Rams—Farmark. Oblong Punch-hole near ear.				

Sale Rams—Earmark, Oblong Punch-hole near ear.

Wool and Mutton. The same to-day—proportionately better—as 40 years ago.

VIGOR.

4000 Wangamong Stud-bred Ewes, 3 to 13 years old, marked 85% very fine lambs. 1918, ditto 98%. "Wollindina," pure Wangamong breeding many years, marked 96% lambs.

The "Fly Trouble" does not affect Wangamong Sheep or Wangamong blood largely infused.



HARDINESS.

1914—Driest Year on Record—6 inches Rainfall.

All Wangamong Sheep averaged 12½ lbs. Wool.

AUSTRALIAN RECORD, Nov. 14, 1916.

WANGAMONG

over S (with arrow through) in diamond.

Sold by N.Z.L. & M.A. Co., Melbourne.

28½d. (in grease)

50 bales.

All Fleece averaged 28.03d. Record to November 14
All Broken, 1st & 2nd Pieces, 25d. Record to date
All Bellies, 19¾d. Locks, 8d.

All Wool, 20/- per Sheep.

94% BREEDING EWES.

Type Specially Selected Flocks—£6 6s. to £10 10s.—2 years old. Representing 451 sold and delivered during 1913 to 18 old buyers out of 24. **BIG, PLAIN-BODIED, HARDY, LONG-STAPLED, ROBUST TYPE OF 60 YEARS' STANDING.**

Exactly between Wanganella and South Australian Types.

Apply { W. B. Sanger, Director, or }
J. M. Sanger, Manager

WANGAMONG PASTORAL CO., Daysdale, N.S.W.

Brucedale & Curranyalpa Merino Stud Flocks

Brucedale Stud,
established 1850.
Now consists of
Peppin blood ewes
bred at Curran-
yalpa, rams in use
from Bundemar,
Uardry, Boonoke,
and Urangeline.

For particulars
apply to—

H. C. SUTTOR,
Brucedale, Peel,
New South Wales.



Special Stud Ram "DANDY," 4 years old.

Bred at Curranyalpa. Cut 31 lbs. wool hand shorn, September, 1920, 12 months' growth.

Curranyalpa Stud.
Peppin blood from
Boonoke, Bunde-
mar, and Wanga-
nella bred rams
and ewes. Rams
now in use from
Lucernedale,
Haddon Rig, and
Uardry. Big,
strong, hardy,
plain body sheep,
bred on the dry
salt bush plains of
the Darling for
years.

For particulars apply to

CLAUD H. SUTTOR,
"Mia Mia,"
Purlewaugh, via
Coonabarabran.

Mendip Hills Merinos and Halfbreeds

FLOCK ESTABLISHED 50 YEARS.

The Mendip Merinos gained Champion Ram and Ewe at Christchurch Show in 1903-4-5-6, and again in 1915 and 1916. Mendip Halfbreeds have won the "Liston" Cup Competition for Corriedales and Halfbreeds, competing together three times since its inception in 1911.



**Stud
Rams
cut
up to
34 lbs.
Wool.**

**Stud
Ewes
cut
up to
23 lbs.
Wool.**

Champion, Reserve Champion, and 3rd Prize Rams, Christchurch Show.

Average Weight of Fleeces, 27½ lbs.

For particulars apply—

NORMAN RUTHERFORD, Mendip Hills, or G. L. RUTHERFORD, "Connemara," Parnassus, N.Z.

"LAMARA" STUD MERINOS



STUD RAM No. 28 (2½ years.) Sire, "Lord Charles."

BREEDING.

This Stud is a portion of the "Collinsville" Stud Flock, which has recently been subdivided.



"SILVER CHARLES."
Sire "Lord Charles (cost 2000 guineas.)"

For further particulars apply to—

H. MELVIN COLLINS

"Lamara," Booborowie, Burra, Sth. Aust.

Wires: "Lamara," Booborowie, S.A.

Telephone: No. 2, Booborowie.

THE

South Wangamong Stud Merino Flock

Property of CHAS. D. SANGER



4-tooth Selected Flock Sale Rams.

Stud Flock founded in 1853. In 1863 ten Wanganella Stud Rams (the pick of their celebrated imported pure Rambouillet sire, Emperor's Get) were successfully introduced. Since then no other strain has been introduced into the Stud.

Average of all grown sheep (75 per cent. lambing ewes), 12 lbs. 13 ozs.

The 1915 Clip sold in Melbourne to 18½d., and Pieces to 15½d. in grease.

" 1916	"	"	"	22½d.,	"	"	19½d. "	"
" 1917	"	"	"	25½d.,	"	"	21½d. "	"

For particulars of Flock and Stud Rams apply to—

CHAS. D. SANGER, South Wangamong, Corowa, New South Wales.

THE GUMS MERINOS

Large Frames—Strong Constitutions—Long Staple—Bold Fleeces



Special Stud Ram, 2½ Years Old.



Three 1½ Years Old Stud Ewes. Cut 18, 19 and 20 lbs. Wool respectively.

Founded on Murray, Koonoona and Canowie blood, the Stud is true to the pure South Australian type. Bred on saltbush country and without any pampering the sheep will stand up to the hardest conditions.

The Property of
THOMAS H. PEARSE & SONS,

The Gums—Florietown—S. Aust.

Phone—58 Kooringa

Apply—The Manager, The Gums.

The Springfield Pure Merino Stud

Goulburn

New South Wales.

**Founded in 1838 by the late W. P. FAITHFULL.
Bred since 1871 by A. LUCIAN FAITHFULL.**



ADMIRAL,

Bred by A. Lucian Faithfull. Weight of fleece, 29 lbs. 4 ozs. 12 months 3 days growth. Length of Staple, 4½ inches.

For further particulars apply to—

A. LUCIAN FAITHFULL,
Springfield, GOULBURN, N.S.W.

TELEGRAPH AND TELEPHONE ON,

These sheep are noted for their very high cutting value per fleece. Also for their hardy, strong constitutions, doing well in any climate, and growing to a great size.

The A. A. D. Pomeroy wool, bred by A. A. Dalglish from Springfield bred rams and out of ewes by Springfield bred rams for the last **ten** years, **topped** the Sydney market for greasy wool. In 1917, **40** bales realised 29d. and **44** bales, 29½d.

This year (1918) same A. A. D. Pomeroy wool has realised **30d.** per lb.

This year (1919) wool the progeny of Springfield bred ram again **topped** Sydney market, viz. **Lerida 30½d.**



30 Special Stud Ewes, bred by A. Lucian Faithfull.
Typical style of Springfield Merinos.

Average weight of Fleeces, 12 months' growth, unhoued, 18 lbs. 4½ ozs.

COBRAN

PURE PEPPIN BLOOD.

DENILIKUIN, NEW SOUTH WALES

"COBRAN" for the past 30 years at least has been the premier wool clip of Riverina, and has with very few exceptions topped the market during that period.



COBRAN 4-tooth Ram. Length of staple, 5 inches.

For full particulars apply

**C. H. BESLEY, The Olderfleet, Melbourne, Vic., or
The Manager, COBRAN, Deniliquin, N.S.W.**

The "COBRAN" wool is noted for its robustness, great length of staple, excellence of character and high yield; the sheep are big framed, plain bodied, heavy cutters very even in type, and have been bred on these lines since its inception.

Goolgumbla Stud Merinos

The property of
Mr. GEORGE STUART.

**Pure Peppin strain,
large frames,
strong constitution,
long staple.**

All the ewes in the Goolgumbla Stud are by pure Wanganella, Haddon Rig, and Boonoke rams from ewes of the same blood.

For particulars apply—

**The Manager
GOOLGUMBLA,
Jerilderie,
N.S.W.**

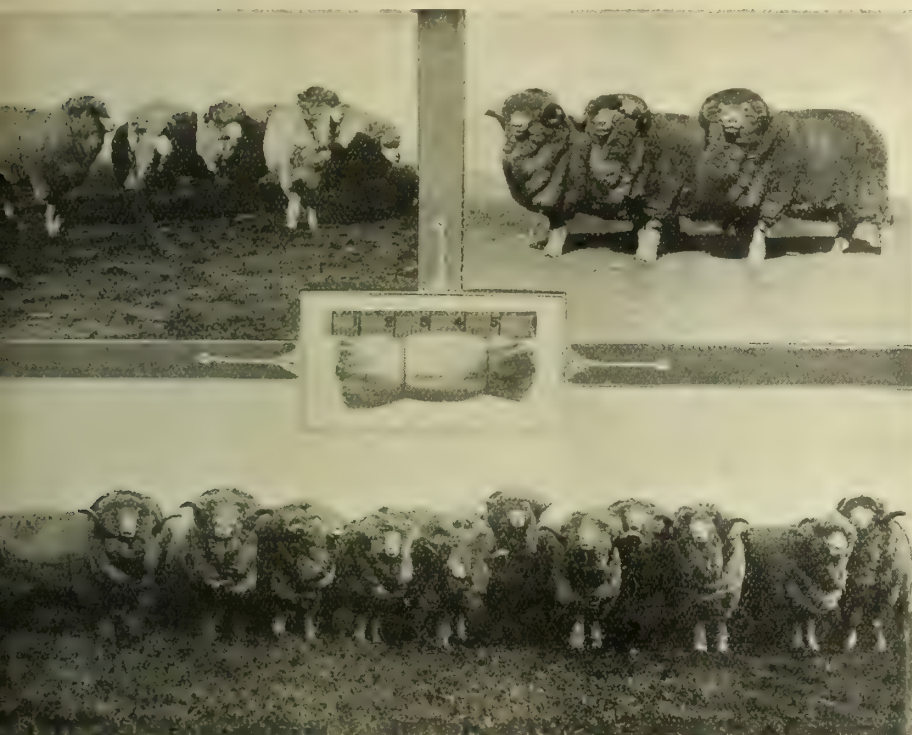


Goolgumbla Stud Ram.

MERRIBEE STUD FLOCK (Late Bull Plain)

MAINLY MURRAY Blood.

Established 24 Years.



Extra Large Frames.

Heavy Fleeces of long, strong, combing Wool.

All MERRIBEE grown sheep averaged 13 lbs. 3 ozs. wool with barely 12 months' growth—Lambs averaging 5½ months old cut 5 lbs. 2 ozs.

ORDERS BOOKED FOR RAMS.

Particulars on Application.

W. W. KILLEN

Merribee, Barellan, N.S.W.

Telegrams—
Barellan (thence Telephone).

WIRRA WIRRA STUD MERINOS

At MT. CRAWFORD, SOUTH AUSTRALIA.



Grazed at large on natural grasses only.

Bred by and the Property of MURRAY DAWSON,
Wirra Wirra, S.A.



WIRRA WIRRA, 5½ years old Stud Ram, No. 300.

MURRAY DAWSON, WIRRA WIRRA, Mt. CRAWFORD,
SOUTH AUSTRALIA.

BARRATTA MERINO STUD

Pure Peppin Blood.

Property of
AUSTRALIAN, MERCANTILE, LAND and
FINANCE CO. LTD.

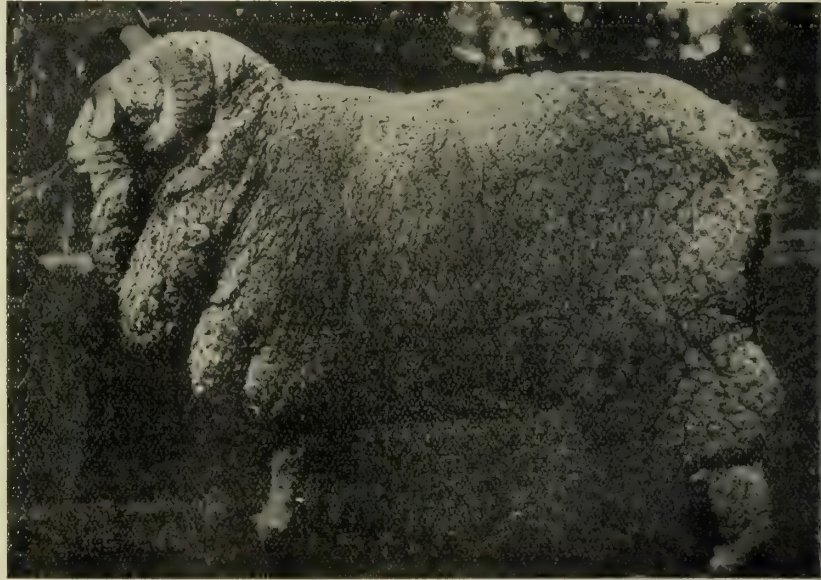
This Stud was commenced by the Company in the year 1893, on another property, by the purchase of high class stud ewes and rams from Messrs. Austin & Millear, Wanganella, and since then, from time to time, purchases have been made from Wanganella, Wanganella Estate, Stud Park Deniliquin, Murgha, and Haddon Rig.

STUD and FLOCK RAMS FOR SALE.

For particulars apply:—The Manager,
BARRATTA, DENILIKUIN

or to

AUSTRALIAN, MERCANTILE, LAND & FINANCE CO. LTD.
Sydney—Melbourne—Brisbane



BARRATTA BRED RAM.—Grand Champion Australian Sheepbreeders' Show, 1917.

Photo by Amate

CASSILIS MERINO STUD

The Property of A. BUSBY



The Cassilis flock was founded by the late A. Busby in 1829. Great care was taken in procuring the best rams then available. In the fifties, "first choice" rams were secured from Havilah. These were continued until 1868, when a very high class stud ram was brought there. Since then, the flock has been bred within itself.

The sheep are large-framed, plain-bodied and carry fleeces of high quality, density and character.

These rams have been very successful in Central Queensland.

The flock has been classed for many years by the late J. C. Darke, and is now being classed by W. J. McCarthy.

Particulars on application from:—



**THE MANAGER, CASSILIS STATION, CASSILIS, N.S.W.
or DALGETY & CO. LTD., SYDNEY.**

WARRAH MERINOS

The Property of
The A.A. Co.

The Warrah Sheep are plain bodied, large framed and carry heavy fleeces.

For particulars apply THE MANAGER, WARRAH STATION, Willow Tree, N.S.W.



Stud Rams sent to Melbourne Ram Sales, 1918.

MULWALA STUD MERINO FLOCK

FOUNDED 1863.

The flock has always been bred on the same lines.
Under management of James Sloane since 1877.

For particulars apply:—

James Sloane & Son,

Mulwala Station, Mulwala; or Wood Park, Jerilderie,
N.S.W.

NALPA STUD MERINOS

E. C. & J. L. STIRLING, South Australia.

The flock is one of the oldest established in the State,
and a noted prizetaker in both SHEEP and WOOL.

NALPA secured all champion prizes for Merino wool as
plotted Royal Show, Adelaide, 1914 to 1918. Also first
and special prizes for two best rams' fleece, Melbourne
Royal, 1919.

STUD AND FLOCK RAMS FOR SALE.

Apply to **Manager, Nalpa Langhorne's Creek, South Australia**

Telegrams: Fullarton, Wellington, E.



No. 4-1—Double Reserved Champion, Australian Sheep Breeders,
Association. Melbourne, 1917. Sold to Geo Seibertzen, South
Africa, for 1000 guineas. Out fleece 34 lbs.

THE GUNDARY PLAINS MERINO STUD



STUD RAM JUPITER.

The Gundry Plains Stud Ewes were originally purchased
from the stud flocks of Messrs. Litchfield, Cooma, and
A. Lucian Faithfull, of Goulburn. Stud Rams were pur-
chased from the above flocks, and from Boonoke, to mate
with the above ewes. The aim of the flock has been to
produce a robust, plain-bodied, strong-wool sheep, and they
are noted for their heavy fleeces of strong combing wool.

For further particulars apply to—

A. R. MAPLE-BROWN,

Gundry Plains, Goulburn, N.S.W.

PENROSE STUDS of Pure Bred LINCOLN & ROMNEY Sheep

Registered in the Lincoln Sheep Breeders' Association's Flock Book and the N.Z. Romney Association's Flock Book.



RANGATIRA V.
Lincoln Ram bred by Wm. Perry

ANNUAL SALE

is held during 3rd week in
January of each year.

For particulars
apply:—

Wm. PERRY, Penrose, Masterton, N.Z.



CHANCELLOR IV.
Romney Ram bred by Wm. Perry.

The Romney flock was founded from the flock of Mr. A. Matthews, mo particularly through that great sire Premier I., who was the sire Premier 267. Premier 267 has a very successful show record, only being beaten on one or two occasions and then by his flock mates. His sons have made record prices for N.Z. Romneys.

THE CARR'S PLAINS IDEALS

The IDEAL Sheep are finer in the wool than the Crossbred. They have been bred rather towards the Merino, and the fibre is more of the character usually yielded by a Comeback. This accounts for the high price obtainable for the clip, and gives it an unique character. The Carr's Plains Ideals are

AUSTRALIAN BRED SHEEP FIXED TYPES

They cut the same weight of wool as ordinary Merinos and get the same price, but they realise more per head for the whole fleece because they cut much more fleecy wool and less skirtings than the Merino; also the carcase is bigger and returns more than Merinos.

For fuller particulars and samples of wool, write to:—

**H. H. WETTENHALL
AND SONS**

Carr's Plains, via Stawell, Vic.

WELLINGTON LODGE STUD South Australia.

Merino Sheep.

Pure bred for 60 years. Founded on Learmonth blood, and later Canowie, Wanganella, and Murray blood.

A few selected and flock 1918 rams for sale.

Shorthorn Cattle.

Pedigree Shorthorns of Angas, Derrimut and imported blood.

A few young bulls and heifers for sale.

Thoroughbred Horses.

Colts and fillies from yearling upwards, by Kerlie and Iownit, usually a few of each for sale.

Apply—

**ALLAN McFARLANE, Wellington Lodge, East Wellington, S.A.,
BENNETT & FISHER, Bowman Buildings, Adelaide.**

Hilstead Romney Marsh Stud.

Combines the best English, New Zealand, Victorian and New South Wales Blood.

The Stud was founded by the purchase of fifty ewes and one ram—Cardington Supreme 1st—from the registered flock of Mr. Geo. F. Doyle, Cardington Hall, Molong, N.S.W., and by the purchase of the stud ram Egerton No. 77 of 1913 from the well-known registered flock of Mr. A. Hickman, Court Lodge, Kent. The flock has been from time to time added to by importations of the best English blood, five ewes from the flock of Mr. R. S. Strouts, Kent, in lamb well-known registered rams, 10 ewes specially selected by A. Chapman (Secretary Kent or Romney Marsh Association), three special stud ewes from Mesham Flock, Kent, two ewes and a ram from the flock of Mr. A. J. Hickman, Kent. Further additions have recently been made from the flocks of Mr. A. J. Hickman, Mr. S. M. Osborne, Bolaro, N.S.W.; three prizewinners from Mr. A. E. T. Payne, Yarraview, Lilydale, Victoria; Messrs. V. H. and W. H. Yelland, Trevor, Newlyn, Victoria; Mr. Thomas McDowall, Brightside, Braidwood, N.S.W., and Mr. Geo. Doyle, Cardington Hall, Molong, N.S.W.

STUD AND FLOCK RAMS FOR SALE.

For particulars apply **J. B. SAUTELLE, Hilstead, Bibbenluke, N.S.W.**



3 SPECIAL STUD EWES from the MESHAM FLOCK, KENT.

WILLEROO ROMNEY MARSH STUD

REGISTERED IN THE AUSTRALIAN LONGWOOL SHEEPBREEDERS' ASSOCIATION FLOCK BOOK (FLOCK NO. 29).

The property of **PAT. OSBORNE, Willeroo, Tarago, N.S.W.**



Willeroo Ram No. 46 of 1915.

1st Prize and Reserve Champion at the Royal Show, 1917, 1st Prize at the N.S.W. Sheepbreeders' Show, 1917, and Grand Champion at the Melbourne Royal Show, 1918.

The Willeroo Rams also made the highest average price at the Sydney Stud Sheep Sales—an average of £56 17s., the highest average for Longwool Sheep in Australia.

THIS Flock was founded in 1910, and now comprises 1100 Stud Ewes. The Ewes purchased for this flock are from the registered flocks of Mr. J. E. Quested, Kent, England; Mr. W. F. Jacob, New Zealand; Mr. G. F. Doyle, Molong, N.S.W., and from the late Mr. James Gibbs' flock, which was all pure Elham blood.

Rams purchased for this Flock from England—in 1915 three from Mr. J. E. Quested, in 1916 two from Mr. Quested, one being the Champion at the Ashford Show and a First Prize Ram at the Royal Show, England; and one in 1916 from L. H. and G. W. Finn—this ram won the Championship for Wool at the Ashford Ram Show in 1916.

Prizes won by this Stud in 1916, 1917, 1918 and 1919 at the Sydney and Melbourne Shows:—7 Grand Championships; 3 Reserve Championships; 38 First Prizes; 26 Second Prizes; 17 Third Prizes; and 3 First Prizes for Wool.

The Willeroo **Romney Marsh Cross** have also won First Prizes four years following, competing against all breeds at the Sydney Sheep Shows, as follows:—

First Prize for Pen of ten Fat Wethers for Export.

First Prize for Pen of ten Fat Wethers, judged on Commercial Value.

First Prize for Pen of ten Fat Wether Lambs, judged on Commercial Value.

Stud and Flock Rams always on Sale.

Full Pedigrees of all Stud Sheep are Kept.

FOR FURTHER PARTICULARS APPLY TO—

D. A. WHITE, Stud Manager, Willeroo, Tarago, N.S.W.

New Zealand Romney Marsh Sheep Breeders' Association

(Incorporated)

THE attention of Flock Owners in Australia is drawn to the merits of the New Zealand Romney Sheep. The stud flocks of the Dominion can supply your demands for rams and breeding ewes.

Our Romneys hold the World's Championship.

Correspond with the Association for full particulars.

The Secretary, P.O. Box 40, Feilding, New Zealand.

Willigobung Romney Stud

REGISTERED FLOCK No. 25 A.L.S. ASSOCIATION.

Founded 1910 from imported stock. Elham and Short blood and individual records kept. Bred on high basaltic country on natural grasses only, and are famed for their constitution and wool wherever introduced.

For further particulars apply—

J. W. CUNINGHAM, COURABYRA, N.S.W.



MAJESTIC. Station bred.

Streanshalh Corriedales

Registered Flock No. 3.

Founded in 1904 on the importation of 41 pure ewes and one ram from C. H. Ensor's White Rock (N.Z.) Stud, since when only the purest rams have been introduced.

The stud has been very successful at leading shows in Tasmania, while the wool from flocks that have used Streanshalh rams usually commands record prices in the Tasmanian market.

Stud and Flock Rams for Sale.

Apply the owner—

NORMAN NICOLSON,

Streanshalh, Macquarie River, Tasmania.



WHITE ROCK.

Bred at Streanshalh and winner of five championships and many first prizes.



Grand Champion Corriedale Ram, Sydney, 1920. Purchased subsequently by N. Nicolson.

BOLARO ROMNEYS

Registered Aust. Longwool Sheepbreeders' Association, Flock No. 23.

The PROPERTY of S. M. OSBORNE.

Bred on high country and **grass-fed**. Noted for **great constitution and very heavy, dense fleeces**.

The following prizes were won at the N.S.W. Sheepbreeders' Show, 1919 (the largest show of the breed in Australia):—Champion Ram, Reserve Champion Ram. 1st and 2nd prizes for ram over 2 years, 1st and 3rd prizes for ram over 1 year and under 2 years, 2nd prize for ram under 12 months. Reserve Champion, 1st and 3rd prizes for ewe over 1 year and under 2 years. 1st, 2nd and 3rd prizes for ewe under 12 months old, 1st and 3rd prizes for pen of 2 rams under 12 months old, 1st prize for pen of 2 ewes under 12 months old.

STUD and FLOCK RAMS always
on Sale at reasonable prices.

For further particulars apply—

FRANK FILE, "BOLARO,"
COOMA, N.S.W.



BOLARO No. 15 of 1916.

1st and Champion of N.S.W. Sheepbreeders' Show, 1919.

BUSHEY PARK CORRIEDALES

(Registered).

Foundation: Lincoln—Merino.

This flock was founded by the purchase of over 1000 specially selected studs at the dispersal of Mr. Leonard White's famous flock (No. 9, N.Z.F.B.)

CONSTITUTION.

Note the shape of these sheep. They have robust constitution and large symmetrical frames, as well as heavy fleeces.

WOOL.

The wool is a dense, shafty, true halfbred, and is noted for its excellence of character and length of staple.



PREPOTENCY.

Having been carefully line-bred for many generations, the whole flock shows a strong family likeness and fixity of type. The rams are consequently extremely prepotent, having the power of impressing their characteristics on their progeny.

SHOW YARD RECORD.

The Canterbury Agricultural and Pastoral Show, held annually in Christchurch, is the "Mecca" for Corriedale sheep in New Zealand. For many years Mr. White's sheep have been great prize takers. His latest achievement was the winning of the Championship Gold Medal for Ram, and the Corriedale Cup for most points in rams in 1919.



STUD & FLOCK RAMS FOR SALE.

For particulars apply to

WRIGHT, STEPHENSON & CO. LTD., Stud Stock Salesmen. P.O. Box 462. Dunedin, N.Z.

or The Proprietor,

J. A. JOHNSTONE, Bushey Park, Palmerston South, N.Z.

TEVIOTDALE REGISTERED CORRIEDALES

The Drought Resisting Breed

These Sheep have been bred on the Teviotdale Estate for 38 years, and are the heaviest clipping Corriedales in the Dominion.



TEVIOTDALE CHAMPION RAM.

They are guaranteed to breed Absolutely True to Type.

They have been under the charge of the originator since the inception of the flock

Experience with these sheep during the recent drought at Tocal Station in Western Queensland, proves them to be ALL BUT DROUGHT RESISTING.

Where Merinos died, THE CORRIEDALES SURVIVED.

The recent successes of this flock comprise:—

At the Panama Pacific Exhibition

Reserve Champion Ewe

First and Second Prizes for Ram Lamb. First and Second Prizes for aged Ewes. First, Second, and Third for Yearling Ewes. Second for Yearling Ram. (No aged ram from this flock was exhibited.)

Corriedale Wool is the best for Khaki

In the wool section at the Panama Exhibition, Teviotdale wool was the admiration of all experts, and secured the following awards: 1 gold medal, 2 silver medals, 1 bronze medal.

There is no doubt that the Corriedale is the future general purpose sheep for highest quality of wool and mutton.

At the scouring competition last November Teviotdale sheep again gained first place for heaviest fleece.

Rams and Ewes for sale in quantities

G. D. GREENWOOD (Originator of the Breed), Teviotdale, Amberley, New Zealand

"The two most profitable general utility breeds."

Corriedale Sheep

for constitution, carcase, big lambings and bulky fleeces of even type and high value.

The Corriedale Park Stud, Wagga Wagga, New South Wales (Australian Corriedale Breeders' Association Flock No. 1), founded in 1882 by mating Stud Merino rams and Stud Lincoln ewes, inbred ever since, an outcross obtained by the introduction of the very highest grade of Stud rams, mainly from the N.Z. and Australian Land Company's

Moeraki Stud, New Zealand (founded in 1874).

During the past five years sheep from the Corriedale Park Stud have taken over 100 first and 20 Champion Prizes at Australian Sheepbreeders' (Victoria), N.S.W. Sheepbreeders' (Sydney), Melbourne Royal, Wagga Wagga, Albury, and Hamilton Shows.

RAMS cut from 15 to 25 lbs. wool. EWES cut from 10 to 15 lbs. wool. Pen Pure Corriedale Wethers sold in Melbourne Sale Yards at £5 per head. Wool grown in Riverina appraised Geelong, 1917, at 23½d. per lb.

NOTE.—Inspection of original letters from purchasers from all over Australia invited.

It pays to have the best.



Corriedale Rams, Ewes, Lambs, and Wethers.

Bred by, and the property of, J. F. GUTHRIE, Corriedale Park, Wagga Wagga, N.S.W.

500 Pure Rams (Poleys) of 1919 drop, for delivery at from 5 guineas upwards.

Red Polled Cattle



FLIGHT COMMANDER, 21 months, by Belligerent (imp.) ex Birdseye.

The most prepotent breed—splendid milkers, ready fatteners to heavy weights.

The Stud at Corriedale Park was secured from Mr. Ben Osborne, of Redbank, Harden, New South Wales—all imported or descended from high-class imported cattle.

The young stock are by **RENDELSHAM ELECTOR** (imp.)

Sire now in use **FLIGHT COMMANDER** by **BELLIGERENT** (imp.)—Dam, the famous cow, **BIRDSEYE**.

Pedigreed bulls for sale at from 40 guineas upwards.

APPLY J. F. GUTHRIE, Geelong, Vic.,

OR ANY AUSTRALIAN STOCK AGENTS.

THE WHITE ROCK CORRIEDALE STUD FLOCK

THE NEW BREED OF THE NEW CENTURY.

Wool clip equal in value to the best Merino flocks.

Mutton and Lamb the finest quality grown in Canterbury.

Robust constitutions and an up-to-date sheep.

Weight of fleece up to 28 lbs.

Corriedale wool highest price in New Zealand markets.



Corriedale Stud No. 1-18, sold in Sydney July 1920.

Grand Champion Sydney, 1920.

A GREAT COMBINATION OF WOOL AND MUTTON.

Champions International Show, 1906.

Champions, Rams and Ewes, Canterbury Metropolitan Show, 1910.

Champions at Launceston and Hobart Shows, 1910-1911, bred from this flock.

Grand Champion, Sydney, 1920.

Stud Rams and Ewes delivered at any port in the world.

Recent Exportations have been made to all the States in Australia, South Africa, America, British East Africa, all parts of New Zealand, and other places.

Flock Established 1889. Registered N.Z. Flock Book.



Two Corriedale Stud Rams sold in Sydney July 1920.

VARIOUS SHOW RECORDS INCLUDE—

PANAMA EXHIBITION, U.S.A. — Champion and Reserve Champion Rams, Champion Ewe. Also other prizes. Gold and silver medals for wool (fleeces).

SYDNEY SHEEP SHOW, N.S.W. — Grand Champion Rams and Ewes 1915. Many other prizes.

BRISBANE EXHIBITION, Queensland. — Champion Rams and Ewes 1915. All other prizes.

NEW ZEALAND SHOWS. — Champion Ram Ashburton Show, also Stringfellow Memorial Cup. Champion Ram Nelson Show. Champion Ewe Rangiora Show. Many prizes Christchurch Show, including the Corriedale Cup for most valuable combination of wool and mutton, single ram, also the Quibell Cup for best average value three rams. Half-breeds competed for this also. Different teams of sheep competed at each of these Shows. Practically all were sold 1915. Reserve Champion and other prizes, Christchurch, 1919.

PROGRESS.

The greatest invention in modern Sheep Farming is the Freezing Industry. The Freezer opens to the Sheep Farmer the Meat Market of the whole world. Before only Wool could reach the World's Markets.

PROGRESS.

To-day it is most profitable to grow sheep which combine the wool value of the Merino and the meat value of the British Breeds.

THE CORRIEDALE REPRESENTS PROGRESS.

FLOCK AND STUD RAMS FOR SALE.

For Particulars apply to

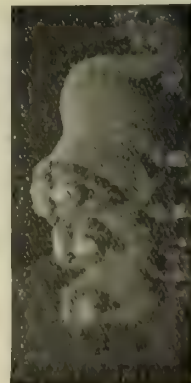
C. H. ENSOR, White Rock, Rangiora, N.Z.

OR TO YOUR AGENTS.

Note the bold appearance,
denoting constitution



Note the evenness of type
these sheep show.



The N.Z. & A.L. Co.'s Corriedales



4-tooth Ram.
Champion and winner of two Specials, Christchurch Show, 1915.

The Company's flocks are No. 1 and No. 2 in the New Zealand Flock Book, and are the oldest in existence. Show-yard successes during the past 10 years have been very numerous, and include in that time 10 Championships at Christchurch, the premier show for the breed in New Zealand.

The New Zealand and Australian Land Company's New Zealand Corriedale Flock originated at the Levels Estate in Canterbury in 1874, when Mr. W. S. Davidson, the present General Manager, put 1000 specially selected Merino Ewes to Lincoln Rams, and their progeny, kept absolutely pure, now number over 6000 Ewes. The Flock was kept at The Levels until that property was resumed by Government in 1904, when part of the Corriedales was sent to Hakataramea, in Canterbury, and the remainder to Moeraki, in Otago, since which the purity has been strictly maintained.



4-tooth Ram.
Champion and winner Silver Shield, Christchurch Show, 1917.

STUD and FLOCK RAMS FOR SALE.

APPLY TO THE

New Zealand and Australian Land Co. Ltd., DUNEDIN.

The Rakahuri Corriedale Flock



Champion Corriedale Ram, Rangiora, 1915.
Bred by Hugh Ensor.

One of the best quality and heaviest
woolled flocks in New Zealand.

Established the record price of
19½d. for Corriedale Greasy
Fleece Wool at the Christ-
church sales, Nov. 11th, 1915.

For shape and constitution the
Rakahuri sheep cannot be sur-
passed. Winners of many prizes.
Flock established 1889. Registered
N.Z. Flock Book

STUD and FLOCK RAMS FOR SALE.

For full particulars apply to—

DALGETY & CO. LTD.

or HUGH ENSOR, Rakahuri, Rangiora, Canterbury, New Zealand.

WHITE ROCK MAINS CORRIEDALE STUD FLOCK

CANTERBURY, NEW ZEALAND.

Pure bred for over 40 years.

WOOL AND MUTTON

Leading stud Corriedale flock masters of New Zealand are using these rams, and the progeny of the flock are continually winning leading prizes at the chief shows in the Dominion at which Corriedales are shown.

RAMS FOR SALE

For full particulars apply—

WM. MACKINTOSH, White Rock Mains, Rangiora, Canterbury, N.Z.

OR DALGETY & CO., CHRISTCHURCH, N.Z.



Pair of First Prize Corriedale Ram Hoggets

The Eurella and Wairoa Corriedales



The flocks are direct descendants from 800 ewes purchased during 1904-5, and a subsequent purchase from the N.Z. and A. Land Co.'s Corriedales (No. 1 N.Z. Flock Book), established in 1874 and thus the oldest in existence.

Origin Lincoln-Merino and no other blood ever introduced.

All rams used in these flocks have been from the parent flock or bred by owners.

Registered in Australian Corriedale Sheep Breeders' Association
Flocks Nos. 15 & 16.

Following previous successes, at the 1919 Sydney Sheep Show these flocks practically "swept the pool," taking all First, Reserve and Champion Prizes.

Stud and Flock Rams For Sale. Guaranteed to breed true to type.

For particulars apply to—

**D. MACFARLANE, Eurella Estate, Rylstone, N.S.W., or to
MACFARLANE BROS., Wairoa Estate, Narrabri, N.S.W.**

WYAMBEH CORRIEDALE STUD

The property of

**John A. Sloane, Wyambeh, Mulwala, N.S.W., and
John A. Sloane & Co. Ltd., Neyliona, Carrathool, N.S.W.**

Flock Founded 1882 by H. J. Corbett.
Lincoln Merino Blood only. When exhibited have always proved successful, winning Champion Prizes 1918, 1919, 1920 at the Australian Sheepbreeders' Association Show. Registered Australian Corriedale Sheepbreeders' Association.

For Particulars of Rams for Sale apply—

JOHN A. SLOANE, Wyambeh, Mulwala, N.S.W.



WYAMBEH, Two-year-old Stud Ram.

R. C. FIELD

Westfield

Westbury

Tas.

Shorthorn Stud

Founded on pure stock purchased from the Van Diemen's Land Co. about 1840. Only best blood used since.

STUD AND HERD BULLS FOR SALE.

EAST TALGAI ABERDEEN ANGUS STUD

strong, Akitio, N.Z., and Proud Peer of Tolarno, bred by the late W. C. Grubb, of Tasmania, both of which are now in use in the stud. The herd at present consists of about 70 breeding cows with a fine lot of heifers coming on. Numerous prizes have been taken at the Brisbane Exhibition and other Shows in Queensland

The East Talgai Aberdeen Angus Stud was formed some years ago by the importation of 8 high-class cows and a bull from the leading studs in New Zealand. In 1917 the whole of the Boolarwell, Queensland, stud of pure cows was purchased and since then two high-class stud bulls have been secured at high figures, viz. Mahoe of Akitio, bred by F. Arm-



"DUKE OF GORDON OF TALGAI." 2 years, 2 months old.
"BLACK JUNO." 12 months. Both by Bonnie Dundee (imp.)
dam Minerva (imp.).



MAHOE OF AKITIO (imp.), 22 months old. Now in use in stud.

The 1919 drop of bull calves will be ready
for Sale towards the end of this year.

Apply **GEORGE C. CLARK**, East Talgai, Elinthorp, Queensland.

COLLENDINA SHORTHORNS.

The Property of Henry Hay & Son.



Foundation
Cows
purchased
from
Bolinda Vale.

Valuable
Young
Stock
for
Sale.

COLLENDINA DUCHESS OF DERRIMUT 21st.

By Collendina Duke of Derrimut 11th out of Collendina Duchess of Derrimut 8th.

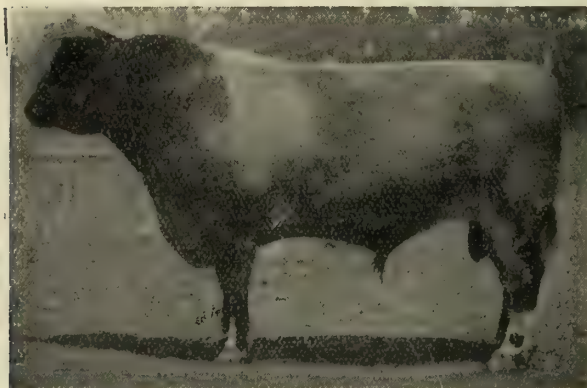
COLLENDINA CORRIEDALES

Pure Corbett Blood.

(Registered Flock No. 12, Australian Corriedale Sheepbreeders' Association.)

For particulars apply—**HENRY HAY & SON**, Collendina, Corowa, N.S.W.

LYNDHURST STUD, WARWICK, Q.



LYNDHURST ROYAL PEER.

Champion Bull, Brisbane, 1912-13-14-15-17; Toowoomba, 1914-15; Warwick, 1911-12-13-14-16-17.

MURWEH, Charleville, Q.

THE MURWEH SHORTHORN STUD was formed in 1917, 400 high-class cows and heifers being sent there from Dulacca West with a number of high-class stud bulls, Lyndhurst bred, many of them prize takers, also the New Zealand bull, Diamond Crest. On the rich western country these cattle have done exceptionally well. The young bulls now for sale at Murweh are a very fine lot.

Stallion—Hartfell. Ayr Laddie ex Light Heart, 10 gns.

NOW FOR SALE—Murweh:—500 Bulls. Lyndhurst, Dulacca West and Murweh bred, 2 and 3 years old. For particulars apply—

C. E. McDOUGALL, LYNDHURST, WARWICK, Q.; or McDOUGALL & CO., WARWICK, Q.

Pure Shorthorn Stud and Herd Bulls

Combining robust constitutions with depth of flesh and quality. The Sires used in the Lyndhurst Stud have all been prize winners and include Bapton's Patriot (imp.), Clippers Duke (imp.), Hampton Bowling (imp.), and Clogher Augustus (imp.). First Sydney and Champion Brisbane. The Sires now in use are Lyndhurst Royal Peer (winner of 13 Champion prizes, including 5 Brisbane Champions), Clogher Augustus (imp.), Lyndhurst Royal Peer 11th (4 Firsts Brisbane and Reserve Champion), 3rd Duke of Ettrick, and Lyndhurst Royal Peer 13th.

The cows are mostly direct descendants of 4 cows imported by the late Hon. J. D. Macansh in 1875, and include 25 cows selected from Mr. Baldwin's Durham Court stud in 1913.

The Lyndhurst cattle have been very successful at the Queensland National Association Show, Brisbane, having won 7 Championships with bulls and 4 with cows during the last 12 years, also any number of class and group prizes.

STALLIONS.

Chantemerle (imp.) Polymelus ex Amphoraria	...	...	...	50 gns.
Seremond (imp.) Desmond ex Serenata	...	...	...	30 gns.

DULACCA WEST STUD, Roma, Q.

THIS SHORTHORN STUD was formed in 1904 with 100 Lyndhurst Stud cows and has since been added to each year from Lyndhurst Stud; also includes purchases from Baldwin's Durham Court Stud. The sires in use are all high class and mostly prize takers.

"MILTON PARK" SHORTHORNS

A FEW
YOUNG
STOCK
FOR
SALE.



MASTERKEY (imp.)

"Masterkey,"
sire of
the winning
female
group at the
Royal Show,
of England,
1920.

For particulars of Stock For Sale, apply to—

The Manager, "MILTON PARK," Bowral, New South Wales.

BINNIA DOWNS SHORTHORNS



BARITONE

Champion Shorthorn Bull, Sydney Royal, 1918; 1st and Champion, Sydney Royal, 1920, and Governor-General's Cup; 1st and Champion, Melbourne Royal, 1920, and winner of Gold Medal awarded by the Shorthorn Society of Great Britain and Ireland. Bought for 1,700 guineas. Now being used in the Binnia Downs Stud.

THE FEMALE STOCK ARE AN EXCEPTIONALLY HIGH-CLASS LOT.

STUD AND HERD BULLS FOR SALE.

For particulars apply—**J. McMASTER, Binnia Downs, Coolah, N.S.W.**

Founded in 1908, and built up on the best blood procurable from leading Victorian studs—J. E. Robertson, Glen Alvie; A. J. Simpson, Clifton; John James, Derrimut; Ball Bros., Zaretan; A. J. Webb, Rathfarnham; N. Falkiner, Noorilim, etc.

The following additions to the stud were made by purchase at the Sydney Royal Show, 1918:—

Stud Bull BARITONE, 2 years 7 months, at 1,700 guineas, from Messrs. Parsons & Robertson, Watch Hill, Vic.

Stud Bull HIGHTON DUKE OF DERRIMUT, 12 months old, at 1,000 guineas, from Messrs. Lidgett Bros., Vic.

Stud Heifer ROYAL JESSAMINE 89th, at 400 guineas, from Messrs. Parsons and Robertson, Vic.

Stud Heifer DUNDAS DUCHESS OF DERRIMUT 13th, at 400 guineas, from Mr. A. J. Simpson, Clifton, Vic.

Edgacote Filbert (imp.) 1075 gns.

Rose of Chedglow 51st (imp.) C.H.B. Vol. 65.

Bianca Belle 9th (imp.) C.H.B. Vol. 64.

Hilda Warden (imp.) C.H.B. Vol. 64

Aikbank Undine 4th (imp.) C.H.B. Vol. 64.

HAMBLETON HILL SHORTHORNS

Pure Derrimut blood and imported stock



SIRES.

Bolinda Duke of Derrimut 392nd and Bolinda Duke of Derrimut 425th, both directly descended from Lindenow Duke of Derrimut 40th.

COWS.

From Bolinda Vale, Rathfarnham, Clifton, and Dugdale and Creber's Studs, Vic.; Estate late James Holmes, Bathurst, N.S.W.; Te Aute Stud, N.Z.; besides English imported females.

A few females 12 months to 3 years for sale. All entered or eligible for entry in S.H.B. of A. Vol. 2.

Full particulars from

Lloyd Jones, Hambleton Hill, Singleton, N.S.W.

BARRAGAN STUD AND HERD

No pampering—All grass fed—Rich colours.

50 Years of careful breeding.

THE BARRAGAN HERD was founded nearly 50 years ago by the late E. Tindale, by the purchase of choice cows from the stud of the late Thos. Lee, Woodlands, Bathurst, and at the clearing sale of W. and J. Lee, of Millbank, Bathurst, whose cattle were descended from the original stud of Wm. Lee, Claremont, Bathurst. Sires used were from the studs of S. Gardiner; Robertson Bros., Colac; J. H. Angas, and the choice of John Lee of Bylong's bulls. Duchess females were also secured from the McCulloch dispersal sales.

The present owner purchased the above foundation, and has since added from the last McCulloch dispersal other females of the Persis (imp.), Lobelia (imp.), May Rose, Lady Weston, and Charmer strains; also the imported bull Prince Millicent (96519).

Bulls now in use were prize winners in large classes at Royal Sydney and Royal Melbourne Shows—Lord of the Vintage and Mahonga's Comet.

Stud and herd bulls eligible for entry in the herd book for sale.



PERSIS VII.

Also pure pedigreed Berkshire pigs and Lincoln rams (registered flock).

The property of

R. S. HARRIS, BARRAGAN BARRAGANDAH, VIA MUDGEE. N.S.W.

Telegrams—WOLLAR.

COOMBING PARK SHORTHORNS



BOLINDA DUKE OF DERRIMUT 400th.

Founded on high-class female stock of Lee and Lowe blood. Extensive purchases of pedigreed cows have also been made from the studs of the late James Holmes, Bathurst; Sir Rupert Clarke, Bolinda Vale; and Mr. Norman Falkiner, Noorilim, Victoria.

The bulls now in use are from Bolinda Vale.

**STUD AND HERD BULLS
FOR SALE.**

THE WHITNEY PASTORAL CO., Coombing Park, CARCOAR, N.S.W.

The Nyingay Shorthorn Stud

THE PROPERTY OF
ROY SIMSON, Mungadal, Hay, N.S.W.

This stud was formed in 1902, and has been continuously selected for the production of sorts that are robust and deep fleshed.

**Stud and selected bulls usually
— for sale; also heifers. —**



NYINGAY SUMMERTON 7TH (Grass-fed) One of the stud sires.



ZARETAN DUKE OF DERRIMUT 22nd.
Purchased at the 1917 Sydney Royal Show for 460 guineas, and is now used in the stud.

GRAMPIAN HILLS SHORTHORN STUD

The Property of A., R., and F. BOWMAN,
Grampian Hills, Bunnan, New South Wales.

This stud was started in the early forties, and its purity has been maintained ever since by the use of the best bulls procurable.

At the Sydney Royal Show, 1918, Grampian Duke of Derrimut 6th was sold for 950 guineas.

STUD BULLS & COWS & HERD BULLS FOR SALE.

For full particulars apply to

A. BOWMAN, 279 George Street, Sydney,
or to the Manager, Grampian Hills, Bunnan.

THE JERULA SHORTHORN STUD

THE PROPERTY OF
COLIN CAMPBELL, Jerula, near Cowra, New South Wales

THE COWS of this Stud have been bred up from the Stud of the late JOHN LEE of Bathurst, and have been successful prizetakers.



NYINGAY WIDE 5th (at 23 months). Realised 400 gns. R.A.S. Sydney Sales, 1916.

Purchased by Mr. Colin Campbell, of Jerula, Cowra, N.S.W.
Bred by Mr. Roy Simson, Mungadal, Hay, N.S.W.



"MOOKI ROTHERFIELD"
Now in use at Mooki Stud

R. R. DANGAR.

Mooki Springs Shorthorns

**HIGH-CLASS STUD and
HERD BULLS FOR SALE.**

APPLY **THE MANAGER,**
Mooki Springs, Quirindi, N.S.W.

DEVON CATTLE

Having regard to the great increase in the size of these Cattle their marvellous constitution, beef producing and improved milking qualities, they have become the best ranching cattle and most suitable for export.

Shows and Sales of Devon Bulls are held by the Society in February and October annually

For all particulars and Herd Book, and for Register of Animals for sale, price 2/-, apply to the Secretary of the Devon Cattle Breeders' Society—

JOHN RISDON, Wivellscombe, Somerset
ENGLAND.



NEW YEAR'S GIFT. 18 months old.
Bred at Gracemere. Sire, Prince Regent 534. Dam, Fancy 215.

GRACEMERE & TORSDALE STUD HERDS

Shorthorns. Herefords. Red Polls.

HIGH CLASS BULLS FOR SALE.

Bred on Red Water Country and inoculated for Pleuro.

ARCHER BROS. Ltd., Gracemere, Qld.

CLIFTON STUD Shorthorns

Old Established Herd of High-Class Shorthorns.

Carefully bred for constitution, quality and early maturity. Winners of many Champions and numerous other prizes at Sydney, Melbourne and Brisbane Shows. Where young sale stock command top prices.

A. J. SIMPSON, CLIFTON, HAMILTON,
VICTORIA.



A Noted Clifton Stud Cow.
BOLINDA DUCHESS OF DERRIMUT 400th.



DIAMOND FAIRY.—1 & R.C. Hastings, 2, Palmerston N., 1916; 1, Hastings, 2 & R.C. Palmerston, 1 & C. Carterton, 1 & C. Wanganui, 1917; 1 & C. Masterton, 1 & C. Marton, 1 & R.O. Hastings 1 & C. Carterton, 1 & R.C. Palmerston N., 1 & R.C. Feilding, 1918; 1 & C. Marton, 1 & C. Taihape, 1, Hastings, 1919, and winning sire with progeny.

BLAIR ATHOL STUD SHORTHORNS

First-Class Stud and
Herd Bulls for Sale.

Write for
Particulars

DALZIELL BROS.,
Hunterville, North Island, New Zealand.



2-YEAR AND 3-YEAR HEIFERS.

The Cannobie Lea Aberdeen-Angus Herd

Founded from one of the best strains and noted for constitution.

Orders can now be booked for Calves (Period 1920).

Inspection Invited. Homestead situated 5 miles from Palmerston North.

J. F. KNIGHT, Newbury, Palmerston North, N.Z.

The Gwavas Herd of Aberdeen-Angus Cattle

NEW ZEALAND

The Property of Mr. A. S. G. Carlyon.



Stud Bull, Quality of Maisemore (Imp.)

ADDRESS:

The Manager, Gwavas Station,
Tikokino, Hawkes Bay, N.Z.

Telephone and Railway: Waipawa.

This herd, which is noted for good constitution and freedom from disease, has lately been improved by importations from the herds of Lord Rosebery; Kerr of Harviestoun; Kennedy of Doonholm; Cridlan of Maisemore Park, Gloucester; and Elliott of Duns.



Stud Cow, Pure Pride & Dalmany (Imp.)



Imported Polled Angus Bull, Carolus of Mulben.

EDINGGLASSIE POLLED ANGUS STUD

The property of White Bros., Edinglassie, Muswellbrook, N.S.W.

THIS Stud is founded and built up on blood imported from the best herds in Great Britain regardless of cost, and has been so maintained for the last 20 years.

Young Bulls for Sale, delivered on rail at Muswellbrook.

Further particulars on application to

White Bros., Edinglassie, Muswellbrook, N.S.W.



LADY PRESIDENT 8th.
2 weeks old.

LADY PRESIDENT 4th.
3 years 11 months old. Weighed 1615 lbs.
at Aug. 1918 Brisbane National with Lady
President 7th as calf at foot and she took
1st prize then as cow 2 yrs. and under 3 yrs.

ISIS 2nd.
1 year 8 months old.

LADY PRESIDENT 7th.
1 year 1 week old.



9-month-old Bull Calves

High-class Stud and
Herd Bulls for sale.

All females and bulls
used in the herd are
entered in the Herd
Book.

Herd established near-
ly 50 years.



9-month-old Bull Calves.

CRESSBROOK HEREFORDS

Apply to—

EDGAR C. McCONNEL,
Cressbrook, Toogoolawah, Q.

BELLE VUE HEREFORDS.

The Estate of the late JAMES GIBSON, BELLE VUE, EPPING, Tasmania.



ROSADOR.

Bred by Henry Beattie & Sons, Vic. Sired by Royal Duke,
dam, Lady Roseberry 2nd. Purchased by the Trustees James
Gibson Estate in 1908.



BELLE VUE ROSADOR 4th.

Three years old. Bred by Trustees James Gibson Estate. Sired
by Rosador, dam, Lady Betty. Was Champion Hereford Bull at
the principal Tasmanian Shows in 1918 and 1919.

BELLE VUE MERINOS

Belle Vue is the home of the famous Sir Thomas flock All Belle Vue sheep
are descended from Sir Thomas and the same original lot of pure ewes.

FOR PARTICULARS APPLY—

THOMAS MUIRHEAD, The Manager, BELLE VUE, EPPING, Tasmania.



A great Herd, with a
wonderful Sire—
"PRESIDENT WILSON,"
3494 (imported),
purchased at 2220 Guineas—
at its head.

Bushy Park Stud of HEREFORD CATTLE

This Herd is now composed of a small but very select group of magnificent Cattle, every individual in which is first-class. In fact, it may safely be said without the slightest exaggeration that in no part of the world could they be excelled.

Possessing as they do the great advantage of being reared under natural conditions, absolutely without housing or forcing— even those which are being prepared for Showing being left out at night—it will readily be seen how valuable they must be for breeding good sound-constituted stock. None but long-pedigreed animals are kept in this Herd.

Efforts are now being made to secure shipping for stud stock from New Zealand to South America, which will no doubt be arranged within the next year or so, and it behoves all Hereford breeders to place themselves in a position to take advantage of this great market.

There are now available for private sale at Bushy Park the following high-class Bulls at very reasonable prices:—

Two two-year-old Stud Bulls by "Rufus" (imp.)

A grand selection of Stud Yearling Bulls by "Rufus" (imp.): "Elect 19th," "Maymorn" and "Count Rufus."

And this season the first crop of calves by "President Wilson" (imp.) will make their appearance.

There is also a splendid lot of two-year-old Run Bulls and a few Run Yearlings, all of which have been handled and tied up.

For Further Particulars apply to:—

FRANK MOORE

BUSHY PARK, KAI IWI
WANGANUI, NEW ZEALAND.



LYNDLEY HEREFORDS

☞ Founded on Reynolds, Beattie & Imported Stock.

☞ All herd bulls are pure bred, only Stud Book bulls and cows used.

☞ Lyndley Herefords exhibited since 1913 on 7 occasions and have won 8 Championships, 11 Reserve Championships, 58 firsts and 35 seconds, and hold the Australasian record price 1125 gns.



MANSEL LIBERATOR (imp.) 37,370 E.H.B. Age 2 years 2 months.
Champion Queensland 1920. Now used in Lyndley Stud.

Stud bulls and heifers for sale. Also pure herd bulls.

Inspection Invited.

Apply **JAMES SPARKES, LYNDLEY, JANDOWAE, QUEENSLAND**

Harben Vale Hereford Stud Herd



ADMIRAL (imp.) 22 months.

The "Harben Vale" Herefords are founded on Stud bulls and heifers purchased from the noted breeders, Messrs. S. Reynolds, of "Duninald," Paterson, N.S.W.; J. A. Beattie, "Gisborne Park," Victoria; and Tindal & Son, of "Gunyan," Queensland.

INSPECTION INVITED.

For particulars apply

The Executors of the late R. W. WHITE,
R. K. WHITE, Manager.

Harben Vale, Blandford, N.S.W.

GUNYAN HEREFORD STUD HERD.

STUD & HERD BULLS FOR SALE

All Females are eligible for Entry in A.H.H.B.

Stud Bulls in use at present—

Magnitude (imp.), winner Championship, Brisbane, 1918, Rosador 2nd (First Prize, Sydney), Wonder 3rd (First Prize, Sydney), Sir Edgar (First Prize, Sydney), Lord Lyndley (First Prize, Brisbane).

Apply to

TINDAL & SON, Gunyan, Texas,
via Inglewood, Queensland.



MAGNITUDE (imp.)

RAMORNIE HERFORD STUD HERD

Founded on stock from the famous Gunyan Stud.

Stud and Herd Bulls for sale.

All Herd Bulls are pure bred, only Stud Book Bulls and Cows used.

Apply:—

C. H. TINDAL, Ramornie, Copmanhurst, N.S.W.



COMMODORE 2nd. By MAGNITUDE (imp.)



"LOVELACE" (imp.)
1st Royal Show, Cardiff, Wales, England, under 12 months 1919.

Mrs. C. Lumley Hill.

BELLEVUE STUD HEREFORDS

Bellevue, Queensland

Composed of Pedigree Cows with pedigrees running back ninety years in Stud Books, including such famous Championship Sires as:—"Field Marshal," "The Admiral," "Lord Clare," "Lloyd George" and "Lovelace" (imp.), bred by Sir John Cotterill, Bart., Garnons, Herefordshire, England. Best class Pedigree Stud Bulls and Herd Bulls for sale by Stud Book Sires from England, New Zealand and Southern Colonies.

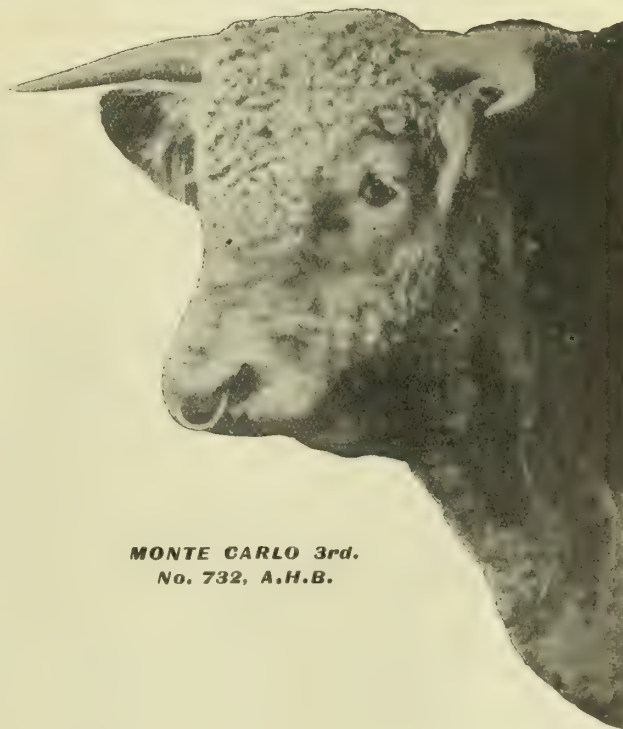
Apply to THE MANAGER, Bellevue, Q'land.

The MICALAGO Stud

***The property of the Executors
of the late Hon. A. Ryrie, M.L.C.***

The Micalago Hereford Stud is founded on Stud Bulls and Heifers purchased from the noted breeders, Messrs. S. Reynolds, "Duninald," Patterson, N.S.W., P. Reynolds, "Hobartville," Richmond, N.S.W. The Stud is noted for robustness of constitution, bred and reared 2301 ft. above sea level.

In 1920, the "Hereford Stud" gained two (2) Champion Prizes, nine (9) Firsts, one Second at Southern Shows, and, in a field of 36, in the class one year and two, at the Royal Jubilee Sydney Show, Third Prize with "Paris," by "Monte Carlo" 3rd, No. 732 A.H.B., Dam, "Spot" 13th, Vol. 6, A.H.B.



MONTE CARLO 3rd.
No. 732, A.H.B.

Inspection invited, apply

The Manager, "MICALAGO," Michelago, N.S.W.



"COTMORE"—1st Prize Grand Champion, R.A.S., Sydney, 1911.

DUNINALD Stud and Herd.

HEREFORD CATTLE.

Stud Bulls and Heifers for Sale; also Pure Herd Bulls. All Herd Bulls bred at Duninald are pure bred. Inspection invited.

Correspondence should be addressed—S. REYNOLDS, Duninald, Paterson, N.S.W.

"ABBEEY GREEN" STUD & HERD HEREFORD & DEVON CATTLE

The "Abbey Green" Hereford and Devon Herds were founded by the purchase of bulls and cows from the best herds in New South Wales and South Australia in 1908. Only best bulls procurable used since.

The cattle are noted for their hardiness, being bred 5000 feet above sea level, and mature very quickly when taken into hot climates.

YEARLING STUD AND HERD BULLS FOR SALE

Full particulars from **H. W. CURTIS, "Abbey Green," Llangothlin, N.S.W.**



"Curley" 96, aged 4 years. Used in Abbey Green Hereford Stud, 1918-20



EATON CONQUEROR. (Imp.)
Aged 2 years 2 months. Live weight, 1820 lbs.

Hobartville Stud

Hereford Cattle.  Thoroughbred Horses.

High-class Stud Stock for Sale. Inspection Invited.

Apply **PERCY REYNOLDS, Hobartville, Richmond, N.S.W.**

BENVENUE STUD HERD OF HEREFORD CATTLE.

Established at "Benvenue," Singleton, N.S.W., in 1873.

The **W.W. BRAND** is well known in Queensland.

IMMUNE.

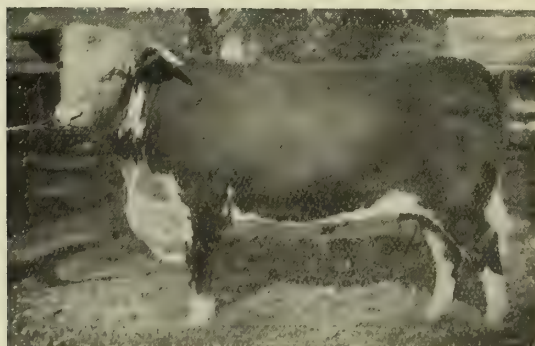


LANSDOWNE (imp.), 2 years 5 months

STUD & HERD BULLS FOR SALE.

All herd bulls are pure bred.
Inspection invited.

**H. H. WADDELL,
Benvenue,
GAYNDAH, Q'LD.**



CORNCRAKE (Imported), aged 2 years and 3 months.

CONDELL PARK

HEREFORD CATTLE. BERKSHIRE PIGS.

Cows are culled heavily every year, and only the best bulls used.

All herd bulls are pure-bred, and eligible for entry in the Australian Hereford Herd Book.

The pigs are noted prize-takers at the R.A.S. Sydney Show.

STUD and HERD BULLS. INSPECTION INVITED.
STUD PIGS FOR SALE.

Apply

A. L. HARRIS, CONDELL PARK, MALDON, N.S.W.

GISBORNE PARK STUD HEREFORDS

English Leicester and Corriedale Sheep

THE HEREFORD STUD was founded 1869 from imported stock. Noted for robustness of constitution, heaviness of flesh and true ness of type. Bred and reared nearly 2000 feet above sea level.

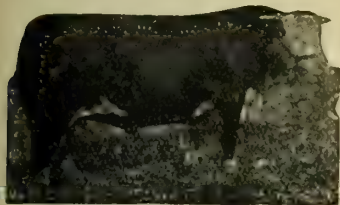
THE ENGLISH LEICESTER STUD was founded 1908 on the good old New Zealand blood. Noted for their hardy constitution and early maturity.

THE CORRIEDALE STUD was formed 1920 on ewes personally selected from leading New Zealand Studs. Famous for wool and mutton. The utility sheep.

J. A. BEATTIE **GISBORNE PARK**
Phone 13 **GISBORNE**



ROYAL BOY 4TH. Stud Sire at 3 years.



"WONDER."

Stud Bulls and Heifers for sale; also Pure Herd Bulls.

All Herd Bulls bred at Tocal are perfectly pure bred, which gives them a great advantage over the ordinary grade bulls.

Inspection invited.

Correspondence should be addressed—

TOTAL Stud and Herd.

Hereford Cattle

and THOROUGHBRED HORSES,

The Oldest Herd in Australia.

Established at Tocal in 1844.

Estate F. REYNOLDS, Tocal, Paterson, N.S.W.

MANSEL COURT STUD HERD.

THREE FIRST-PRIZE WINNING YEARLING BULLS

From a pen-and-ink sketch by
Frank Calderon, R.A.

Reading from the left: MANSEL BANNER MASTER (37354), 1st prize Royal Show, 3rd prize Worcester; MANSEL BANNER GUARD (37350), 1st prize Royal Counties Show; MANSEL BANNER REX (37359), 1st prize Bath and West, 1st prize Hereford and Worcester Agricultural Society's Show.

Four first prizes have thus been won by three different bulls from one herd—a record.

Apply to—

CAPTAIN R. T. HINCKES,
Mansel Court, Hereford, England.



ROYAL FAME at 9 months.

Amateur Kodak enlarged.

GARNONS HEREFORDS

The property of

Sir J. R. G. Cotterell, Bart., Garnons, Hereford,
England.

ROYAL FAME, v. 51, at 9 months. Sire Sovereign 35628, dam Queen Elizabeth by Administrator 27298. Bred by Sir J. R. G. Cotterell, Bart. Sold at a high price to Senor Rodriguez, Uruguay.

During the last 20 years the Garnons Herd has won some 200 Champion and other prizes at all leading Breed and Fat Stock Shows in England. Stock Bull Saladin 31957, sire of Sovereign 35628: 1st and Champion Herefordshire and Worcestershire A.S.; 1st and Reserve Champion Royal Agricultural Soc., Cardiff; 1st Lord Tredegar's Newport, and sold for 4,000gs.; Lovelace, 1st Royal Agri. Soc.; Minstrel, 1st Royal Counties, Reading; Steer, 1st Smithfield Club.

Catalogue of Herd on application.

A. J. HICKMAN & Co.

Halse Grange,

Brackley, Northants.

Cables:

HICKMAN, BRACKLEY, ENGLAND.



The largest Purchasers of Pedigree Live Stock for Export in Great Britain. Illustrated Pamphlets and Testimonials on application.

PEDIGREE DRAUGHT HORSES

The Widgiewa Stud,

NEW SOUTH WALES,

The Property of

F. S. FALKINER & SONS LTD.,

is the largest stud of pedigree draught horses in the Commonwealth.

The mares have been carefully selected without regard to cost, and special attention has been paid to their soundness and breeding.

The imported sires **The Admiral** (Imp.) and **Federation** (Imp.) have been used in the stud. **Baron Belmont** was imported from Scotland in June, 1911, to replace The Admiral.



WIDGIEWA ROSEMONT.—3-YEAR-OLD

3-YEAR-OLD CLYDESDALE STALLION

Bred by F. S. Falkiner & Sons Ltd.

Sire, **BARON BELMONT** (Imp.) (C.S.B. 13973.)

Dam, **ROSEBUD**, by Lord Dundonald (Imp.)

**A Number of Colts and Fillies
are always For Sale.**

F. S. FALKINER & SONS Ltd., Boonoke North, Widgiewa Siding, N.S.W.

A limited number of approved mares taken to Widgiewa stallions.

Some of the Certificated Imported Dams & Sires

and Breeding of the great

Wai-rongoa Clydesdale Stud, N.Z.

SALE EARLY IN 1922.

THE PROGENY OF THE GREAT IMPORTED UNBEATEN MARES

Baron's Brilliant ...	Imported	G.V.L.C. by Baron's Pride
Silver Cloud ...	"	Silver Cup
Ena ...	"	Ascot
Moireen ...	"	Oyama
Lady Buchlyvie ...	"	Bonnie Buchlyvie

Pryde of Trowan ...	Imported	G.V.L.C. by Baron of Buchlyvie
Scotland's Queen ...	"	Scotland Yet
White Rose ...	"	Drumflower
Choicest Queen ...	"	Scotland's Choice

AND LINE BRED FILLIES AND COLTS, STALLIONS AND MARES

By the Great Certificated Imported Unbeaten Stallions

Newton Chief ...	Imported	G.V.L.C. by Up-to-Time
Dunure Fabric ...	"	Dunure Fabric
Royal's Brilliant ...	"	Royal Favourite
Sir Thornley ...	"	Sir Hugh
Baron Winsome ...	"	Baron's Pride

Hiawatha of Aus. ...	Imported	G.V.L.C. by Hiawatha
Scotland's Success ...	"	Scotland Yet
British Times ...	"	Up-to-Time
Scotland's Viceroy ...	"	Scotland Yet
Bonnie Brestknock ...	"	Bonnie Buchlyvie

The First Annual Sale takes place, without reserve, at Dunedin early in 1922. Look for fresh information in the next issue, and notify any of our Branches throughout the world if you are going to attend, so that accommodation, luncheon, etc. may be arranged.

DALGETY & CO. LTD. — AUCTIONEERS.

AVISFORD PARK STUDS, HERDS & FLOCKS

England.

The Property of E. C. FAIRWEATHER, Esq.



SUSSEX GOALKEEPER 34365. Bay, 17 hands, foaled 1915.

PEDIGREE DAIRY SHORTHORNS.

The herd includes the best Dairy Shorthorn families in existence. Only cows giving a minimum of 8000 lb. retained; among these is Leazow Barrington, purchased at Attwater's sale for 1100 guineas, the record price for Dairy Shorthorns. Daily milk records checked by D.S.A.

The Stock Bulls from heavy milking strains are:—

(1) Active Lad 134511 (Grenfell's), sire Waterloo Firebrand 23518 (Potter's), dam Active Lass.

(2) Apley Record Rosador 134663 (Perkins), sire Puddington Rosador (Sanday), dam Clarence Brown 12th.

(3) Thornby Peer, Vol. (Wills), sire Thornby Pioneer 133922, dam Gladys Rose 12th.



TICEHURST NOBLEMAN 2nd.
1st Prize at The Official Spring Show of Sussex Cattle, 1920.

PEDIGREE SOUTHDOWN SHEEP.

The Southdown Flock is registered and individually numbered. It is unexcelled for type, character, and merit, and bred the Royal and Chichester Champions of 1919.

At the R.A.S.E. Show, Cardiff, 1919, five classes were exhibited and five First Prizes won, in addition to the Champion and Reserve Champion.

PEDIGREE LARGE WHITE AND LARGE BLACK PIGS.

The above Studs, Herds and Flocks are under the care of the most experienced managers in each department, Perfect health is a first consideration; every animal on the Estate has been selected or bred for the further improvement of their respective breed generally, and the Estate Stock in particular. Young Stock of all above for sale. Inquiries solicited; inspection invited.

Station—Barnham Junction, L.B. & S.C.R.

Apply THE ESTATE OFFICE, AVISFORD PARK, near ARUNDEL. England.

PEDIGREE SHIRE HORSES.—Stud Horses.

Boro' Draughtsman 34567, sire Warton Draughtsman 27895, dam 72776 Towthorpe Cloudy. Purchased in 1918 at Edgcote sale at the highest price of the year.

Sussex Goalkeeper 34365, sire Champion Goalkeeper 30296, dam 62037 Sussex Plum. Purchased at Newmarket Shire sale at top price in the sale. 3rd in strong class, S.H.S. Show, 1920.

This Stud, besides the above Stallions, possesses others of the best breeding in the country, and the Brood Mares are representative of all the best Shire families.



BETSY GREY 99791.
Winner of numerous prizes, including 2 Firsts, Dairy Show 1919, giving an average of 61 lb. during the Show.

PEDIGREE SUSSEX BEEF CATTLE.

The ideal breed for Argentina, South Africa, and wherever hardiness and robustness of constitution are required.

The Sussex Herd was formed mainly by the purchase of the best cows at the famous Lock Dispersal Sale, and comprises Betsy, Heedless, Darkie, Beauty, Milmaid, and other prize-winning strains.



Cheviot Rams.

For Weight and Quality of Wool and for Mutton, combined with hardiness of constitution and activity, the CHEVIOT is outstanding. CHEVIOTS and their crosses have for years held leading positions in the Smithfield Carcase Competitions.

The Cross with the Merino is becoming more popular every year. Full particulars supplied by the Auctioneers, who will execute Commissions through a Shipping Agent.

**Andrew Oliver & Son, Auctioneers,
HAWICK, SCOTLAND.**



Shearling Ram, "Millknowe Victory," which made the Record Price of £620 at our 1919 Sale.



Oxford Down Yearling Ram. First prize winner at the Cardiff Show of the Royal Agricultural Society of England, 1919.

Oxford Down Sheep

The Oldest Registered Flock.

Individual Pedigree of every sheep. Owned by Hugh Stilgoe, The Grounds, Adderbury, Banbury, Oxfordshire, England. The sheep of the present and the future. Unequalled as a pure breed, or for crossing purposes. They combine beautiful wool, with the best of meat, and will thrive in every part of the world. Many First and Champion prizes. Show Record 1919:—Royal Agricultural Society of England's Show at Cardiff, First and Second Prizes for Yearling Rams, First and Second Prizes for Wool. Birmingham Show, First and Second Prizes for Lambs. London Show, First and Second Prizes and Breed Cup for Lambs.

Telegrams :—"Stilgoe, Adderbury."

The Sheep which sells to-day is the

Suffolk Sheep

Record after Record at Recent Sales. Demand from all Parts of the British Isles.

Unbeaten

Record

on the Block.



Ideal

Hosiery Wool

—Good 56's.

Ten Two-tooth Ewes sold for £500 (a record for ewes of any breed), Champion Pen Society's Sale. Champions over all Breeds, London Smithfield Show, 1919.

Special Sales at Ipswich July, August and September.

For Full Particulars and Expert Selection apply to:

THE SECRETARY, SUFFOLK SHEEP SOCIETY, 25 MARLBOROUGH ROAD, IPSWICH, ENGLAND.

THE BUCKLAND SOUTHDOWN.

Registered No. 550.

OWNEED by Lady Fitzgerald. Descended from such world-wide strains as those known as the Webb, the Throckmorton, the Adeane, the Pagham Harbour, and the Penfold. None are purer or better in respect to flesh or fleece. Full pedigrees available, both of males and females.

The choicest sires only in service, headed by ADISHAM NO. 15 of 1916, 11487 vol. 26, the Champion Ram at Chichester Show and Sale 1917, where he was purchased for 100 guineas.

RAMS, EWES, AND LAMBS FOR SALE.

Apply:—H. WILSON, Buckland, Faringdon, Berks., England.

RAILWAY STATION—Challow, Gt. W. Ry.

TELEGRAMS—Buckland.

SOUTHDOWN SHEEP.

UP-TO-DATE SUCCESSSES.

CHAMPIONS OVER ALL BREEDS AT THE GREAT LONDON (SMITHFIELD) FAT STOCK SHOW in 1916, both alive and dead; also Champion Carcase at Chicago International, 1916, 1917, and 1918. Earlier successes too numerous to record.



SOUTHDOWN WOOL is of the finest quality and texture, and realises more per pound than any other English wool.

SOUTHDOWN MUTTON is the best the world produces, and always commands the highest price.

SOUTHDOWN EWES possess the hardiest of constitutions, enabling them to thrive well in all climates, situations and soils.

SOUTHDOWN RAMS produce by far the best and most profitable carcasses for the British trade, either pure or crossed with any other breed.

CARCASE COMPETITIONS—Smithfield, 1916, Southdowns won First and Champion for pure-bred sheep, and aired the First and Reserve Champion cross-bred lamb. At Chicago, 1916, 1917, and 1918, all carcase prizes went to Southdowns or Southdown crosses, including the Championships. They are unrivalled as mutton producers.

Special Auction Sales in August and September at Chichester (Messrs. Stride and Son) and at Lewes (Messrs. J. R. Thornton & Co.).

Apply to the Secretary, SOUTHDOWN SHEEP SOCIETY, 12 Hanover Square, LONDON, ENGLAND, or to the Auctioneers above-mentioned.

SOUTHDOWN SHEEP

Unsurpassed for Fine Quality of both Mutton and Wool.

CHAMPIONS AT SMITHFIELD SHOW, 1916.

GREAT PRIZE SALE

(Under the auspices of the Southdown Sheep Society)

10,000 Registered Southdown Ewes and Rams,

At Chichester, Sussex, ABOUT AUGUST EACH YEAR.

Auctioneers:

STRIDE & SON, Chichester, Sussex, England

who will execute Commissions.



A typical pen of Yearling Southdown Ewes

Oldport Flock & Shorthorn Herd.

Ryeland Sheep Flock No. 11, and Bates Cattle of Good Families,

With Scale, Good Coats, and Dark Colours.

RYELAND SHEEP—a breed not widely known but possessing a very great merit, both as regards Closeness and Quality of Wool, combined with an Excellent Carcase, a very Hardy Breed that thrives on hard keep.

PRIZES WON AT BREED SHOW, 1918-19.

RAMS AND BULLS FOR SALE.

Apply: C. H. HOBBS, Oldport, Oswestry, Salop.



Ryeland Ram Lamb, 10 months.
Bred by C. H. Hobbs, 1919.



Ryeland Ram Lamb, 10 months.
Bred by C. H. Hobbs, 1919.

ROMNEY MARSH SHEEP.

The Registered Romney Marsh Flock at the Home of the Breed.

NO. 18

Owned by **ARTHUR FINN, Westbroke, Lydd, Romney Marsh, England**

This flock, established for more than 140 years, maintains the highest reputation. Honours gained in 1912: 1st for wool at the R.A.S.E. Show. In the Ewe Flock Competition of the Romney Marsh Sheepbreeders' Association, 1375 Westbroke Ewes obtained the 1st Prize in the large Flock Class, and Reserve for the Champion Cup for the Best Flock.

Inspection invited of 2000 registered sheep grazing on the Marsh under natural conditions.

Telegrams and Cables: ARTHUR FINN, LYDD.

A.B.C. Code 5th Edition used.

Telephone No. 2, Lydd. Lydd is 70 miles from London, S.E. Railway.



Champion Romney Ram at Panama Exhibition, 1915, bred by Mr. Alfred Matthews in New Zealand, sired by a Westbroke Ram out of a Westbroke Ewe, both parents imported from the flock of Mr. Arthur Finn, Westbroke, Lydd.

LUDDENHAM COURT ROMNEYS

Founded 1899.

Winners of

Flock No. 122.

CHAMPIONSHIP FOR EWE FLOCK, 1919.

A Flock of Choice Breeding and merit as proved by above Championship won by ENTIRE FLOCK, judged on the farm in NATURAL BREEDING CONDITION.

INDIVIDUAL PEDIGREES. SOUND CONSTITUTION. TYPICAL FLEECE.

Apply

ASHLEY STEVENS,

Station Telegrams: -FAVERSHAM.

LUDDENHAM COURT, FAVERSHAM KENT.

Quested's Romney Marsh Stud Flock and Herd of Pedigree Red Poll Cattle.**QUESTED'S No. 11 of 1917.**

Champion Ashford Show, 1918. Sold by Public Auction for 1,000 guineas. Resold at Buenos Aires for record price of £1,600.

Over 500 PRIZES

Won for Sheep including:

CHAMPIONSHIP CUP for **BEST FLOCK** of **ROMNEY MARSH EWES** in England.

Championship Cup won at Ashford Show and Sale **Five Years in succession**. **TEN Challenge Cups** won outright at this Show.

1438 Stud Ewes to Ram in 1918.

Individual Pedigree of every sheep since 1894.

For particulars apply to Owner:

J. EGERTON QUESTED

"The Firs," Cheriton, Kent,

ENGLAND.

Cable Address: **ANIMALS SHORNCLIFFE CAMP**
Railway Station, **SHORNCLIFFE, S. E. & C. Railway**

The Surenden-Dering Flock

ROMNEY MARSH SHEEP.

Established 1858.

A typical Flock of ROMNEY MARSH Sheep, individually numbered throughout, is one of the attractions of this well-known sporting domain, owned by

Sir Henry E. Dering, Bart.

(Late 3rd Australian Div.)

The Flock's uniformity of type, character, fleece, and well-covered heads needs inspection to be assessed at its real value. Selections of the choicest bred specimens procurable are always on offer, and Colonial and Foreign breeders are invited to inspect. Every facility is offered for so doing on application to the Agent, Pluckley, Ashford, Kent.

Rail Station, Ashford or Pluckley, S.E. Railway. Telegrams, Pluckley. Telephone, 3A Charing.

The Nash Court Romneys

Registered Flock No. 192.

A typical Flock representative of the choicest strains of blood, mainly those associated with the well known names of Jacknade, Quested, Syndale Farmer and Otham Flocks.

Selections have been exported to Argentine, Uruguay, Chili, Falkland Islands, Japan and India.

Reared naturally and unpampered, the Sheep are hardy and sound in constitution.

Apply the Owner—

MR. R. G. TAYLER,

Nash Court, Margate, Kent, England.

Kent or Romney Marsh Sheep

the hardiest and best grazing mutton and wool sheep in Great Britain. Successfully acclimated wherever they are required.

Annual Ram Show and Sale

Held at Ashford, Kent, in September.

Descriptive pamphlet, list of Breeders and all information from—

W. A. Ball, 12, Hanover Square, London, W.1.

The Hoo Romney Marsh Flock

Founded 1853.

Registered Vol. 1.

Maintained entirely on commercial lines, no flock affords a better selection of thoroughly reliable breeding stock. Yearly culling for over half a century has produced a fixed and most desirable type, the more prominent characteristics being great length and spread of carcase, even and uniform fleeces, and a general flock likeness, with most typical and well-covered heads. The best sires procurable have invariably been used, and the result is that, once a purchaser of Stud Sheep, always a purchaser. Apply the owner, Walter Miskin, White Hall, Hoo, Rochester, Kent, England, Railway Station, Sharnal-street. Telegrams, Hoo, Rochester. Telephone, 10 Hoo.

Kent or Romney Marsh Sheep.

The Adisham Court Flock

FOUNDED 1916.

REGISTERED 1917.

Property of Mr. O. C. MILLEN, Adisham Court, Canterbury, Kent, England.

Descended from the choicest strains of prize winning Blood, reared naturally, none excel it for hardiness, typical character, weight of bone and evenness of fleece. Its 1918 and 1919 records are unexcelled. At Ashford, the principal Breed Exhibition and Sale of the year, in 1918 it won 2nd Yearling Ram R. Champion and 4th best pen of five, and in 1919 2nd best group of five. Its sale averages were—1918, £159/15/-, top price 300 guineas; 1919, £63/2/4, top price 130 guineas. The 1918 Yearling and R. Champion was resold in Buenos Aires for £550.

Apply Owner, as above.

Cables and Telegrams: Wingham.

RYELAND SHEEP

One of the oldest breeds of the British Isles, and the least crossed.

Leading Characteristics

Character and Symmetry. Hardy constituted. Mutton and Wool of the finest quality. Early maturity. Freedom from foot rot. Average weight of fleece washed 7½ lbs. Average dead weight of yearling at 12 months, 70 lbs. Special attention paid to export trade.

Write direct to the Secretary:—

W. H. WOODCOCK,

St. Cuthbert's,

Whitecross Road,

Hereford, ENGLAND.

The Hoaden Court Flock and Herd

ROMNEY MARSH SHEEP

RED POLLED CATTLE

Mr. H. T. GREENSTED, Hoaden Court, Ash, Canterbury, Kent, England

Breeds and owns a Romney Marsh Flock, with full individual pedigrees kept naturally without pampering, resulting in the production of sound vigorous, thrifty sheep, having that most desirable of all qualities—even staple and uniform fleeces. Its notable successes in 1919 were 2nd prize for Small Flocks in the 1919 Flock Competition, and 4th for Yearling Ram at Ashford, 1919.

A Herd of Red Poll Cattle, a breed unrivalled for the dual purpose of Milk and Beef Production, is also kept at Hoaden, and specimens of the best lines of breeding are to be found there.

Rail Stations:—Adisham, Grove Ferry, or Sandwich, S.E. and Chatham Railway. Telegrams, Hoaden, Ash, Canterbury.

The Singleton Romney Marsh

Flock No. 132.

Outright winner of the Champion Prize for best Woolled Ram, Ashford, 1918 and 1919.

This Flock, owned by Mr. R. Stanley Strouts, Singleton, Great Chart, Ashford, Kent, England, ranks amongst the best of its breed. Its history is fully recorded since 1882, none of better breed is procurable, and individual pedigrees are available.

This Flock will be Sold by Auction, unless previously dispersed in its entirety, on the last Wednesday of September 1921. Catalogues and full details of pedigree from:—W. W. Chapman, 4 Mowbray House, Norfolk Street, Strand, London, W.C.2, who will be pleased to execute commissions, arrange for shipment and insurance.

Cable and Telegrams—Sheepcote, Estrand, London.

Telegrams—Great Chart, Kent.

Sydney Royal Show Sales

OF

STUD SHORTHORNS, HEREFORDS, DEVONS, ABERDEEN-ANGUS and RED POLLED,
Commencing Tuesday, 22nd March, at 10 a.m.

PITT, SON & BADGERY Ltd., Sydney,

will hold their Annual Stud Cattle Sales as above, and will be glad to receive early particulars from sellers. Entries close with Royal Agricultural Society, Sydney, on Monday, 21st February.

McPHIE & CO.

CATTLE, SHEEP, AND PROPERTY SALESMEN, &c.

TOOWOOMBA, Branches at **PITTSWORTH, OAKLEY, QUEENSLAND.**
DALBY and CHARLEVILLE.

A. J. HUNTER,
F.I.A.G., ETC.

JAMES HUNTER & CO.
Public Accountants, Auditors, etc.

PASTORAL MATTERS
A SPECIALTY.

DALBY, Q.

LINCOLNS.

C. NICHOLSON, of Horkstow, Lincolnshire, England, has for sale a large selection of Pedigree Rams and Ewes from his world famous flock, originally founded with All Dudding Bred Sheep. In 1919 he made a most unique **WORLD FAMOUS RECORD** at the Royal Show of England by winning every first prize in every single one of the Lincoln Sheep Classes, also the Champion and Reserve Champion. Write for particulars.

THE LEADING LIVE STOCK AGENTS AND EXPORTERS IN ENGLAND are

ALFRED MANSELL & CO., COLLEGE HILL,
SHREWSBURY, ENG.

We are the largest exporters of **BRITISH PEDIGREE LIVE STOCK**,
and are therefore in a position to buy on the best terms.

WE CAN SUPPLY ALL BREEDS OF HORSES, CATTLE, SHEEP AND PIGS.

Our old-established Firm have supplied animals for the foundation of Herds and Flocks in all the stock producing countries in the world, and have regularly supplied the principal breeders in maintaining them with new blood when required.

SHIPMENT AND INSURANCE.—All arrangements for Shipping Stock including Freight, Fodder, Attendance, Insurance, etc. undertaken at Lowest Market Rates. Our Shipping Department makes the Shipping arrangements for several prominent Live Stock Exporters and does the whole Live Stock Insurance of one line of steamers.

The Highest References Given and Required.

ENQUIRIES INVITED.

Cables: "PEDIGREE," Shrewsbury, England.

SOUTH DEVON SHEEP.

Equal to any British Breed in Size of Carcase,
Weight of Wool, and Length of Staple.

Unrivalled for crossing purposes to secure increased depth of flesh, weight of carcase, together with heavier fleeces and increased length of staple. Hardy and full of constitutional vigor, with remarkable aptitude for early development. Two hundred registered flocks to select from.

Ram Sales held annually at Totnes and South Brent, Devon, and Liskeard, Cornwall, in August; and at Truro in September.

List of Flockowners and full particulars from—

W. W. CHAPMAN, The Secretary,
Mowbray House, Norfolk St., Strand, London, W.C., Eng.

GENTLEMAN at present managing the **WORLD'S PREMIER THOROUGH-BRED STUD FARM** wishes similar post in Australia. Will undertake the breeding of any class of horse. Life experience, young, energetic and practical. Highest references and fullest investigations. A worker.

Apply in first instance to "Manager," Box 50, c/o Gordon & Gotch Ltd., 15 St. Bride Street, London, E.C. 4.

Stud Flocks of South Australia



TYPICAL SOUTH AUSTRALIAN RAM.

renowned for constitution, size and heavy cutting fleece of high-class warp wool.

Sheepbreeders requiring Rams or Ewes from any of the South Australian Stud flocks are invited to communicate with the undersigned, who can place expert service at their disposal and afford special facilities for shipment through their Branches at all seaports.

DALGETY & COMPANY LIMITED, ADELAIDE.

SOUTH AUSTRALIAN MERINO RAMS

Being in touch with all the principal breeders
—we are in a favourable position to render
every assistance to intending purchasers;

Elder, Smith & Co. Limited

Stock and Station Agents, Wool Brokers, &c.,

ADELAIDE.

MOREHEADS LIMITED

Brisbane, Queensland.

STOCK AND STATION AGENTS AND WOOLBROKERS

DIRECTORS:

G. E. BUNNING, CHAIRMAN

HARRY BRACKER

W. H. CARTER

J. H. HART

W. ROSS MUNRO

T. McI. TAYLOR, MANAGER

Properties and Stock for Sale in all parts of Queensland

Clearing Sales conducted in any centre

NOTE—WE SPECIALISE IN THE SALE OF STUD STOCK

BRISBANE STUD STOCK SALES

Dalgety & Company Limited

will conduct their Annual Sale of

STUD CATTLE AND STUD AND FLOCK SHEEP

in August, 1921.

(Brisbane Exhibition Week). Exact dates to be named later.

CONSIGNMENTS INVITED.

Dalgety & Company Limited, Brisbane,

STOCK AND STATION AGENTS, WOOL AND PRODUCE BROKERS.

DALGETY & COMPANY LIMITED

SYDNEY.

STUD STOCK SALESMEN.

Pedigreed Cattle of all Breeds Merino, Corriedale & British Sheep

Being in constant touch with all the leading Breeders of the Commonwealth and New Zealand we are in an exceptionally favourable position to secure Stud Stock for intending purchasers.



Four Wanganella Rams from one Breeder that realised

£2950 an average of **£737 10 s.**

at **RODRICK'S ANNUAL RAM SALE**

Next Annual Sheep Event August 16, 17, 18, 1921

1920 Annual Stud Sales, Sheep and Cattle realised £250,000. Merino Ewes realised up to £260 each.

JOHN RODERICK & CO. LTD.

Purebred Stock Salesmen - Bloemfontein - South Africa

P O. Box 248.

Cables: Roderick, Bloemfontein.

Shipments can be made through THE AUSTRALIAN ESTATES & MORTGAGE CO. LTD., William-st., Melbourne.

GROONGAL STUD, N.S.W.

The property of R. S. FALKINER.

English Leicesters Shorthorns.

For particulars apply—
The Manager.

Telegrams:
GROONGAL, CARRATHOOL.

Postal:
GROONGAL, S.W. RAILWAY, N.S.W.

IMPORTANT ANNOUNCEMENT TO PURCHASERS OF STUD AND FLOCK RAMS.

The Services of

Mr. A. L. MORRISON,

The NOTED STUD AND FLOCK SHEEP MASTER, having been retained by

THE CO-OPERATIVE WOOL & PRODUCE CO. Ltd.

he will be available to act for purchasers in the selection of rams for sale by any noted breeders, either direct or in the company of such intending purchasers.

ORDERS and all enquiries to be addressed to

THE CO-OPERATIVE WOOL & PRODUCE CO. Ltd.,
3 BENT STREET, SYDNEY.

NO COMMISSION CHARGE TO BUYERS.

FRANK YOUNG, General Manager.

SUBDIVISIONAL SALE OF THE FAMOUS AND WELL-KNOWN "MARTINDALE ESTATE"—DENMAN, N.S.W.

THE PICK OF THE HUNTER RIVER DISTRICT,

FRIDAY, 18th MARCH, 1921, at THE PICTURE THEATRE, MUSWELLBROOK,

CONTAINING ABOUT

19,657 acres of rich Fattening, Agricultural, Dairying and Lucerne Land, subdivided into 65 blocks of 151 to 572 acres each.

WEAVER & PERRY Ltd., Sydney, and HIGGENS, PARKINSON & Co., Denman (acting in conjunction),

have received instructions from Messrs. MARTINDALE WHITE BROS., Martindale, Denman, to Sell by Auction, at Muswellbrook, on FRIDAY, 18th March, at 1.30 o'clock, "Martindale Estate," containing about 19,657 acres, Freehold, situated at Denman, subdivided into 65 blocks of 151 acres to 572 acres of rich Fattening, Agricultural, Dairying and Lucerne Land, nearly every block having frontage to the Hunter River, Goulburn River, Martindale Creek, and other running streams. Included in the subdivision are **SEVEN COMPLETE DAIRIES.**

TERMS 10 per cent. on signing contract, 5 per cent. on completion of transfer. No further payment till end of second year and then the balance in six equal annual payments bearing interest at six (6%) per cent. per annum.

WEAVER & PERRY Ltd., Sydney, Muswellbrook, Tenterfield, Kempsey, and Dubbo.
HIGGENS, PARKINSON & Co. - - - - - Denman and Muswellbrook.

Illustrated Booklets and Lithographs are being prepared and will be forwarded on application.

SALE OF LAND AND STOCK.

DISPOSAL SALE OF

**The late Dr. Robert McNab's
KNAPDALE ESTATE**

NEAR GORE, SOUTHLAND,

— NEW ZEALAND —

AT

Theatre Royal, Gore,**SATURDAY, 5th March, 1921**

At 2 p.m.

WRIGHT, STEPHENSON AND CO. LIMITED, in conjunction with **J. E. WATSON AND CO. LIMITED**, acting under instructions from the Public Trustee, Administrator in the Estate of the **LATE DR. ROBERT McNAB**, will offer by auction the **KNAPDALE ESTATE** in two lots at the above time and place. Particulars are as follows:—

LOT 1.—The Homestead Block, comprising 456 ACRES practically all good level land, in excellent order, well subdivided and laid off with shelter plantation. Buildings comprise new modern dwelling, with all conveniences, connected by telephone, new farm steading with stockman's cottage, large wool shed, sheep yards, &c.

LOT 2.—The farm known as "MARSHALL'S," comprising 200 acres, well fenced and subdivided, and with all necessary buildings.

Also on

Wednesday, 9th MARCH, 1921

At 11 a.m.

the whole of the Stock and Farming Plant, Household Furniture, &c., including the Knapdale Stud of Shorthorn Cattle, comprising 68 head of Cows, Heifers, and Bulls, including the Imported Bull "DIAMOND PRINCE" and "CUDHAM PURE GOLD," and the Knapdale Stud of Romney Marsh Sheep, comprising 140 stud ewes, 38 Rams, and about 80 Lambs.

NOTE.—The Knapdale Stud of Shorthorn Cattle and Romney Marsh Sheep is one of the leading Studs in the Dominion to-day, and has met with considerable success at the various Shows in Canterbury and Otago. The foundation of the Shorthorn Cattle was laid by the importation from Aberdeenshire by the late Dr. McNab, of the well-known sire, "DIAMOND PRINCE," together with two in-calf heifers, and this was added to by the selection of several additional cows and heifers from the well-known stud of Messrs. R. D. McLean and Arch. McLean, of Hawkes Bay; Mr. Gibbston, Kiwitea, Feilding; the old established herd of Mr. Henry Pan-nett, Springston, Canterbury; and the herds of Robert Crombie and Robert Miller, Otago.

The Romney Marsh Flock was founded in 1911 by the purchase of ewes from Mr. Ernest Short's well-known Parorangi Stud at Feilding. These were mated to Castlerock Rams. The Rams from this Flock invariably top the market at the Ram Fairs each year.

The Horses and Agricultural Machinery are of a very high order, and altogether the Sale offers a unique opportunity for Buyers to secure a first-class stock and plant, and one of the most up-to-date stud farms in the Dominion.

The Land Sale will be held at Gore on Saturday, the 5th March, 1921, and the Stock and Plant will be offered at the Homestead on Wednesday, the 9th March, 1921. Fuller particulars and Catalogues on application to the Auctioneers or to the Public Trust Offices at Gore or Invercargill.

**World's best Arabian Stallions, Brood Mares.
Celebrated Prize Strains.****WENTWORTH, Crabbet Stud, Crawley, Sussex, ENGLAND.****CRESSBROOK.****STUD HEREFORDS FOR AUCTION.
CRESSBROOK STUD, Toogoolawah, Qld.****Wednesday 2nd and Thursday 3rd March, 1921.**

Under instructions from Mr. Edgar McConnel, we will auction at the Station Yards a portion of the **FAMOUS CRESSBROOK HEREFORD STUD**, as Mr. McConnel is desirous of reducing his numbers. The cattle to be auctioned are all pure bred and all entered in the A.H.H. Book. This Stud was very heavily culled two years ago, and the whole of the cattle then rejected were sold. The cattle to be offered comprise approximately:—

- 72 STUD COWS AND HEIFERS**, No. 9's and older, all entered in A.H.H. Book, either in calf or with calves at foot to High-class Stud bulls, including some by Imported English Bulls. Included in the Cows are the well-known Champion Cows "Lady President 3rd and 5th."
- 52 STUD HEIFERS**, No. 0's, all registered as calves and eligible for entry in A.H.H. Book—a magnificent lot.
- 10 STUD HEIFERS**, pure bred, unregistered, by Stud Bulls ex Stud Cows.
- 16 STUD BULLS**, No. 0's and 9's (3 No. 0's by English Sires).
- 20 (about) HERD BULLS**, No. 0's and 9's—a first class lot.

**BRED IN TICK COUNTRY AND SHOULD BE IMMUNE.
FOR GENUINE STRAIGHT-OUT SALE.**

Catalogues will be prepared and posted to applicants.

For fuller details apply to:

MOREHEADS LIMITED,**Stud Stock Salesmen, BRISBANE.****FOR AUCTION.****Central Queensland Cattle Property
"DISNEY"****184 Square Miles.****2115 Cattle.****64 Horses.**

Under instructions from Messrs. Ramsay Bros. Ltd., we will Auction the above First-class Cattle Property, viz.:—

At ROCKHAMPTON, TUESDAY, 12th APRIL, 1921,**At Leichhardt Hotel, at 10 a.m. sharp.**

"DISNEY" is situated 100 miles North of Clermont, and 12 miles from Twin Hills Telegraph Station in the South Kennedy District, and adjoins the well-known cattle properties: Elgin Downs, Mt. Douglas, Twin Hills, Avon Downs and Diamond Downs.

Area, 184 Square Miles. **Lease** expires 31st March, 1932. One Quarter resumable at any time.

Rent, £181 per annum.

Country.—First-class breeding or fattening country comprising good ridges and forest country; also black soil plains, with Blue, Mitchell, Flinders and other grasses, edible shrubs, Saltbush, etc.

Watered by Mistake Creek (6 miles frontage) with Permanent Holes, and two other creeks; also Sub-artesian Bores with big supplies, each bore equipped with Windmill, Tanks and Troughing.

Improvements.—All securely fenced, mostly new; Yards, Dip being erected. Two-storied House, Kitchen, etc.

Plant.—Necessary Working plant, and Portable Pumping Head.

Stock.—2115 Branded Cattle, Well Bred Herefords, comprising 1262 Females, nothing older than No. 3's; 814 Males, No. 0's to No. 7's; 39 Hereford Bulls. Estimated branding 700 this season. 64 Horses.

$\frac{1}{2}$ Inches Rain has just fallen, and the Property is in First-class Order.

For Sale on a "Walk in, Walk out" Basis. Terms, $\frac{1}{2}$ Cash, Balance in 5 equal Annual Payments, Interest at 6 $\frac{1}{2}$ per cent. per annum.

Inspection can be made at any time prior to Sale.

For Fuller Details, etc.; or mode of Inspection apply promptly to:—

Moreheads Limited, Brisbane.**Australian Estates & Mortgage Co. Ltd., Rockhampton.****Appleton & Co., Clermont.**

Auctioneers in conjunction.

West Australian Pastoral Properties for Sale.

WELL-KNOWN ASHBURTON STATION.

"Minderoo" & "Hardey Junction"

TOGETHER WITH ALL STOCK AND PLANT.

THURSDAY, 24th MARCH, 1921, at 3 p.m., at the Palace Hotel, PERTH.

ELDER, SMITH & CO. LTD., and DALGETY & CO. LTD., in conjunction, have been favoured with instructions from the owners to submit to public auction on the above date the well-known "Minderoo" and "Hardey Junction" Stations, as going concerns, together with all Plant and Stock:—

"Minderoo" Station.

Situated on the Ashburton River, and adjoining the port and town of Onslow. The homestead, well situated on the run, is only 22 miles from Onslow.

Area.—522,000 acres Pastoral Lease (No. 225/96).

Rental and Tenure.—The annual rental payable to the Crown is 20s. per 1000 acres subject to appraisal. An application for extension of lease has been made, and when approved the lease will expire on 31st December, 1948, subject to section 30 of the Land Act Amendment Act 1917.

Waters.—The Ashburton River runs through the centre of the property for about 55 miles, and contains many permanent pools. There are 23 wells, 21 of which are equipped with mills, tanks and troughing.

Fencing.—280 miles of fencing (218 miles of 5-wire fencing, and 62 miles of 6 wires) enclose 18 paddocks.

Buildings.—Wood and iron homestead of 6 rooms and lounge, equipped with "Delco" lighting plant, bachelors' quarters of 5 rooms, blacksmith's shop and tool room, garage, cart shed, and men's quarters, out-camps. The usual stock yards, in addition to 4 sets of drafting yards.

Plant.—2 waggons, 2 drays, spring cart, buggy, 2 Ford motor cars, harness (camel and horse), tools, and the general station equipment.

Stock.—About 26,000 sheep,
10 cattle,
120 horses,
15 camels.

Date of Shearing.—July.

Rainfall.—Average about 8 inches.

Remarks.—"Minderoo" is one of the earliest established stations, and is regarded as comprising some of the finest pastoral country in the mid north of W.A. There is an abundance of top feed in the form of many varieties of edible shrubs and soft spinifex, and is abundantly furnished with indigenous grasses and herbage in season. With further improvements it should carry about 45,000 sheep, in addition to a limited number of big stock. Its proximity to a port is no mean asset.

"Hardey Junction" Station.

Situated.—At the junction of the Hardey and Ashburton Rivers, about 140 miles from the town and port of Onslow.

Area.—343,000 acres of Pastoral Lease (Leases Nos. 224/96, 2579/102, 776/102, 775/102, 593/102, 152/96, 561/102, 151/96, 150/96, 149/96).

Rental and Tenure.—The annual rental payable to the Crown is 20s. per 1000 acres, subject to appraisal. An application for extension of lease has been made, and when approved the lease will expire on 31st December, 1948, subject to section 30 of the Land Act Amendment Act 1917.

Waters.—There are several permanent pools in the Ashburton River, which traverses the station, and in addition there are 11 wells, 10 of which are equipped with windmills, tanks and troughing.

Fencing.—The property is subdivided into 14 paddocks, the fencing consisting of 5 and 6 wires.

Buildings include homestead, men's quarters, shearing shed, and shearers' quarters (erected in 1919), out-camp sheds, &c., 4 sets of drafting yards.

Plant.—3 waggons, dray, sulky, motor cycle, camel and horse harness, and usual sundries required for the efficient working of a station. Stores will be sold with the station.

Stock.—About 11,000 sheep, 75 cattle, 200 horses, 19 camels.

Remarks.—"Hardey Junction" has been long established and successfully conducted as a pastoral proposition. It is well supplied with top feed and grasses. For the last 25 years the excellent horses bred on the station have been in demand throughout the State, the country being peculiarly adapted for breeding horses of excellent bone. The mating of sheep and the selection of rams have been carefully tended, and the flocks have attained a high standard.

For further particulars apply

ELDER, SMITH & CO. LTD., Perth.

DALGETY & CO. LTD., Perth.

IMPORTANT SALE OF STATION FREEHOLD

At Kobyboyn, Seymour.

(14 miles from Seymour, 12 miles from Yea, 15 miles from Avenel, and 74 miles from Melbourne). Well-known.

"FERNSIDE ESTATE," 8667 ACRES.

At Scott's Hotel, Melbourne.

THURSDAY, 24th FEBRUARY, 1921, at 3 p.m.

NEW ZEALAND LOAN & MERCANTILE AGENCY COMPANY LTD., MACARTHUR & MACLEOD and HEYWOOD, ROSE & CO., in conjunction, have been favoured with instructions from Messrs. Chisholm Bros. to offer at Scott's Hotel, Melbourne, on the 24th February, at 3 p.m., the well and favourably known "Fernside Estate." This property has been in the uninterrupted possession of the Messrs. Chisholm Bros. for upwards of 40 years, and is now being put on the market in consequence of dissolution of partnership. The country is in great heart, carrying a heavy sole of rich nutritious grasses. All the boundary fences are wire netted (1½ in. mesh), and there are 39 subdivisional paddocks, 17 of which are wire netted. The property is free from rabbits, and there is an entire absence of noxious weeds of any description.

The property is very compact, 6930 acres being in one block (the original Fernside Estate), balance, known as Ferris's, 1737 acres, being within two miles of the main station.

The carrying capacity, averaged over a period of 10 years, is more than a sheep to the acre, besides 300 head of Shorthorn-Herford cattle. The JC/Anchor brand of Merino wool has been sold by New Zealand Loan Company for upwards of 40 years, and is well and favourably known. The 1918-19 clip of 219 bales averaged as follows:—Fleece, 29.42d.; 1st pcs., 21.69d.; 2nd pcs., 18.79d.; bellies, 17.39d.; and the 1919-20 clip of 207 bales:—Fleece, 27.95d.; 1st pcs., 21.98d.; 2nd pcs., 17.85d., bellies, 17.7d., which figures prove beyond doubt that the country is admirably suited for the production of high-class Merino wool. The Fernside Merino Stud is noted for its high quality, and sale rams are eagerly sought after by Victorian and Riverina breeders. The big, plain bodied Merino wethers bred and fattened on the place are highly favoured by butchers in the Newmarket yards, where the consignments have always brought top prices. The Fernside Shorthorn stud of cattle is also widely known, and the bullocks produced on the property have always commanded highest rates in the metropolitan and local markets.

The attention of station owners in all parts of Victoria and elsewhere is particularly directed by the agents to this realisation, as the Messrs. Chisholm Bros. are determined to sell, and as the property is situated in an ideal climate, with average rainfall of 27 ins., it must appeal to all land seekers as a very sound fattening, grazing and woolgrowing proposition. For working alone, or in conjunction with a northern property, it cannot fail to give very satisfactory results.

There are two W.B. Homesteads, the main one comprising 9 rooms, kitchen and men's dining room, and bathroom, while the other contains 9 rooms, bathroom and scullery. Outbuildings:—Cart sheds, 2 chaff houses, 2 stall stable, harness room, up-to-date woolshed, 8 stands, wool press (fixture); shearers' hut, kitchen and dining room; in fact, every requisite and convenience for the efficient carrying on of a property of its size and capacity. Both houses have Gloria light plants installed. Water is laid on to the dwelling, stables, woolshed and sheep dip. The country is abundantly watered by springs and creeks. There is telephonic communication with Melbourne (through Seymour)—continuous service.

Title.—Certificate.

Special Notice.—This season's clip has just been sold at auction up to 42½d. per lb.

Terms.—10 per cent. on signing of contract; 15 per cent. on acceptance of title within five weeks, when delivery will be given; 10 per cent. in 12 months; 10 per cent. in 36 months; balance in 5 years. Interest at the rate of 5½ per cent. per annum.

Solicitor.—A. E. Sedgefield, Seymour.
NEW ZEALAND LOAN & MERCANTILE AGENCY CO. LTD., 538 Collins-street, Melbourne; **MACARTHUR & MACLEOD,** 612 Collins-street, Melbourne; **HEYWOOD, ROSE & CO.,** Seymour, auctioneers in conjunction.

CLASSING.

Having been nominated by the late Mr. J. C. Darke as his successor, and having taken over the classing of all the leading studs which were annually classed by the deceased gentleman, I am now prepared to undertake similar work on behalf of other breeders in any part of Australia.

Having had a wide and varied experience in the selecting, purchasing, mating and breeding of the different types of stud sheep under tropical, sub-tropical, and temperate conditions, both in Australia and South Africa, I have confidence in my proving a not unworthy successor to the late lamented Mr. Darke.

CLASSING and grading of all types of stud and flock sheep undertaken.

Full information re terms, etc., supplied on application.

Stud and flock rams and ewes also personally selected and purchased on commission.

W. J. McCARTHY,

C/o Bank of New South Wales,
Melbourne.

Famous Gundagai Estates "DELTRAIT" & "BILLAPALAP"

FOR SALE BY AUCTION

**At the Royal Exchange, Sydney,
On TUESDAY, 29th MARCH, at 11.30 a.m.**

PITT, SON & BADGERY LTD., Sydney (Sole Agents), HAVE RECEIVED INSTRUCTIONS FROM THE OWNER TO SELL AS ABOVE.

THE WELL-KNOWN "DELTRAIT" STATION, the property of the late Wm. Richardson for 50 years, is situated on the main Southern Road to Melbourne, near Tumblong Railway Station, and comprises about 7700 FREEHOLD ACRES, some of the best Agricultural and Pastoral land in N.S.W. Abundantly watered, and magnificently improved for economical working.

"BILLAPALAP." Situated 10 miles from Adelong, and 18 miles from "Deltrait." Area, 8600 Freehold Acres of great wool-growing and sheep-breeding land. Splendidly watered, and reproductively improved.

Full particulars on application to the Sole Agents:

PITT, SON & BADGERY LTD., Pastoral Exchange, Sydney.

THE Stockowner's Guide

Price 15/-

THE PASTORAL REVIEW,

Wool Exchange,
Melbourne.

or

Bligh Chambers,
Sydney.

Special Notice to Retiring Squatters.

WITHIN EIGHT MILES OF THE CITY.

STRATHFIELD STRATHFIELD

STRATHFIELD has a wonderful train service, all the Country trains stop there, through journey to Sydney takes only 12 minutes. It is the **RECOGNISED FINEST AND HEALTHIEST SUBURB**, and possesses hundreds of SYDNEY'S BEST RESIDENCES.

STRATHFIELD IS THE HOME OF THE WEALTHY.

AN OPPORTUNITY HAS NOW OCCURRED to secure one of these beautiful homes, and I have been favored with instructions to offer the following property for **PRIVATE SALE**.

The situation is only several hundred yards from the **RAILWAY STATION** with spacious grounds, laid out in flower beds, lawns, tennis court. On this fine block is erected a **A HANDSOME BRICK BUNGALOW**, with tower, heavy concrete foundations heavily chain bonded throughout, large reception room, spacious reception hall,

hall and porch, very large dome-roofed dining room, smoke room, large bedroom with large dressingroom, three other bedrooms, Mosaic tiled bathroom, with lavatory, two maid's rooms, maid's bathroom, maid's lavatory, box room, large kitchen, laundry, various cupboards, servery, three pantries, very large fitted cellar, wood and coal house part main building.

A **LARGE BRICK GARAGE**, man's room, gas laid on, 5-ft. pit, washing table, tool house, glass house, electric light throughout, gas additional, power plugs.

Copper hot water service to both wings connecting servery, main bathroom, laundry and maid's bathroom. All front rooms and halls Siberian oak parquet floors with inlay design. Spacious **VERANDAH** back and front.

This is a charming property, in splendid order, and worthy of immediate inspection.

Further particulars from

C. MONRO, Auctioneer and Real Estate Agent,

Phone City B3639. 28 Martin Place, SYDNEY; and CRONULLA.

Residence for Sale at East Malvern

Most favored suburb of Melbourne, six miles from General Post Office. Eleven rooms, also billiard room, cellars, &c., tennis court, large garage, stables and men's rooms. Land over five acres, extensive flower and fruit gardens. Well-kept lawns, wide carriage drives, cow and horse paddocks. Very high position, overlooking valley and ranges. Electric tram cars stop at gate. Two railway stations few minutes' walk.

For further particulars apply to

S. STOTT, 428 Collins Street, MELBOURNE.



Stud Stock.

The Official Organ of the "Australian Longwool
Sheepbreeders' Association,"
and
The Official Organ of the "Stud Beef Cattle
Breeders' Association of Australia."

Latest Stock Returns.

AUSTRALIA AND NEW ZEALAND.

	SHEEP.		CATTLE.		HORSES.	
	1919.	1920.	1919.	1920.	1919.	1920.
N. S. Wales ...	37,381,874	28,890,040	3,280,676	2,858,753	722,723	648,469
Queensland ...	18,220,985	17,379,332	5,786,744	5,940,433	759,726	731,705
Victoria ...	15,778,902	14,422,745	1,596,544	1,631,120	523,788	513,500
S. Australia ...	6,625,164	6,014,565	342,768	349,562	269,255	264,501
W. Australia ...	7,183,747	6,697,951	943,847	880,644	180,094	174,919
Tasmania ...	1,841,924	1,781,425	218,234	214,442	41,221	39,452
N. Territory ...	47,520	—	420,362	638,431	26,674	26,231
Total Aust.	87,080,136	75,186,058	12,589,175	12,513,385	2,523,481	2,399,177
New Zealand ...	25,828,554	23,914,506	3,035,478	3,101,945	363,188	346,407
Argentina ...	—	44,850,000	—	27,050,000	—	8,323,815

N.S.W. & S. Aust returns in each case are to 30th June, 1919, & 30th June, 1920
Q. & W.A. " " " " to 1st Jan., 1919, & 1st Jan., 1920
Victorian & Tas. " " " " to 1st Mar., 1919, & 1st Mar., 1920
N. Territory " " " " to 1st Jan., 1917, & 1st Jan., 1918
New Zealand—Sheep returns only are to 30th April, 1919, & 30th April, 1920.
Cattle and horses are to 31st Jan., 1919, and 31st Jan., 1920.

Forthcoming Shows, 1921.

FEBRUARY.

22-24—Uralla, N.S.W.
23-24—Inverell, N.S.W.

MARCH.

1-2—Yass, N.S.W.
1-3—Tamworth, N.S.W.
1-3—Tenterfield, N.S.W.
2-3—Bomala, N.S.W.
2-3—Casino, N.S.W.
3-5—Maitland, N.S.W.
4-5—Adelaide (Autumn), S.A.
8-10—Mudgee, N.S.W.
8-10—Quirindi, N.S.W.
8-10—Glen Innes, N.S.W.
O-11—Cooma, N.S.W.

APRIL.

13-15—Narrabri, N.S.W.
13-15—Orange, N.S.W.
13-16—Grafton, N.S.W.

MAY.

3-4—Charleville, Q.
10-11—Mitchell, Q.
17-18—Blackall, Q.

31 and June 1-3—Dunedin Winter, N.Z.

JUNE.

21-24—Palmerston North National Dairy, N.Z.
23-25—Rockhampton, Q.

AUGUST.

8-13—Brisbane National.

SEPTEMBER.

19-24—Melbourne Royal.

Hereford Herd Book Rules.

Defining the Breeder of a Calf.

It may not be generally known to Australian Hereford breeders that under the English Hereford Herd Book rules the owner of a cow at the time the calf is dropped is accounted the breeder of the calf. The more logical rule in U.S.A. registers the calf in the name of the owner of the cow at the date of service, and similarly in Australia, sec. 22 of our Herd Book says: "The breeder of an animal shall be deemed to be the owner at the time she was served to produce the calf for which the application is made."

Victoria Downs, Morven, Queensland.

The Shorthorn Stud Property of Messrs. Lord Bros.

By H.B.

The above stud has recently come very prominently before the cattle owners of Australia, and more particularly Queensland, through the extensive purchases at high prices made by these young and enterprising breeders during the past two years.

Prior to noting these investments, the writer was much struck with the high quality and rich colours of some Shorthorn fat steers sold at Brisbane at various times on account of owners. Through the medium of the brands register the writer ascertained they were bred by Messrs. Lord Bros. at another property owned by them. Encouraged by the appreciation which this baby beef met with, they decided to launch out and breed both stud and herd bulls.

They had already made a success of breeding Merino rams through starting with the best material obtainable, and were determined to let no obstacle interfere with their success as cattle breeders, as will be seen by the number of high-class animals secured and the prices paid for them. Unfortunately space does not admit the full pedigrees to be given.

The most important purchases were effected when Mr. Norman Falkiner was disposing of his high-class cattle to make room for his splendid equine stud.

Among these purchases was Duchess of Widgiewa 6th, by Moira Duke of Derrimut 5th, costing 250 guineas, with a red bull calf at foot by Tuppal Duke of Derrimut 31st. At 200 guineas each the following choice cows were secured, viz.:

Matilda's Duchess of Tuppal 21st, sired by Emperor of Lindenow, with a red and white heifer calf by the champion 1100-guineas Wilgul Duke of Derrimut. (Kindly note where the initials DD are used they stand for Duke or Duchess of Derrimut to save space.) Matilda D. of D. 16th, by same sire, dam Duchess of Boorool, with red and white bull calf by same sire as above. Tuppal D. of D. 17th, by Cherry Oxford Duke 3rd, dam Bolinda D. of D. 367th, with red bull calf by Tuppal D. of D. 31st, Moonbria Duchess of D. 3rd, by Rotherfield Emperor, imp. (82121), dam Bolinda D. of D. 3rd, with roan bull calf at foot by Tuppal D. of D. 31st. Tuppal D. of D., by Cherry Oxford Duke 3rd, dam Widgiewa Duchess, with bull calf at foot by Calyce Duke of Wagga. Calyce's Duchess of Moira, by D. of D. 5th, dam Moira Calyce 6th, with roan heifer calf by champion Wilgul D. of D. Also Rosemary 120th, sire Spicy King, imp. (75717), dam Rose Garden, with roan bull calf by Tuppal D. of D. 31st. Lady Fortunate 78th, bred by C. H. Angas, got by Rugia's Prince 33rd, dam Lady Fortunate 70th, red heifer calf at foot by Tuppal D. of D. 31st. Beverley Duchess 77th, bred by J. H. Angas, dam Beverley Duchess 55th, red heifer calf by same sire.

At 150 guineas each they got from the same vendor:—Noorillim Butterfly, sired by Bolinda D. of D., dam Lady Fortunate 77th. Noorillim Viscountess, got by Wilgul D. of D., dam Matilda's D. of D. 4th. Noorillim Snow Queen, by the above sire from Moonbria D. of D. 3rd. Matilda's Duchess of Tuppal 3rd, dam Duchess of Boorool 5th, with roan bull calf by Wilgul D. of D. Ennerdale Maid, sired by Master Seddington, dam Aldsworth Maid, imp. (C.H.B.), with heifer calf by Tuppal D. of D. 31st. Lady Fortunate 77th, 9 years old (C. H. Angas), sire Adbolton Thalia King, roan heifer calf by previous sire. Moonbria D. of D., by Moira D. of D., dam Duchess of Thule, with red bull calf by Wilgul D. of D. Bolinda D. of D. 367th, calved November 1906, by Bolinda D. of D. 128th, R. Clarke's famous sire at Bolinda Vale; her dam Bolinda D. of D. 301st, with roan bull calf by Wilgul D. of D. The 367th is dam of Tuppal D. of D. 31st, which is proving such a successful sire in the stud. Also Tuppal D. of D. 6th, sire Emperor of Widgiewa, dam Moira D. of D. 12th, with red bull calf by same sire. Duchess of Widgiewa 3rd, sire Moira D. of D. 5th, dam Duchess of Boorool 84th. Noorillim Lady Darlington, sire Duke of Connaught 31st, dam Lady Darlington 42nd, imp. (C.H.B.), Matilda Duchess of Tuppal 4th, sire Moira D. of D. 5th, dam Duchess of Boorool 60th.

Other purchases were from A. J. Simpson, Victoria. At Sydney Royal Show, 1920, in a dull market, 300 guineas was paid for Clifton D. of D., by Grand Duke of Clifton 5th; also Dundas D. of D., by Clifton Cherry Boy—both very beautiful specimens of the fashionable Derrimut strain.

At the Brisbane show sales, 1920, their already large purchases were added to by the acquisition of Newlyn Duchess of Derrimut 142nd, bred by Tippet Bros., at 100 guineas, the second highest-priced female sold, and from that well-known breeder John Dug-

dale, Rosehill D. of D. 18th at 100 guineas and the 19th and 20th of the name, all three excellent specimens of the breed, 14 months old. From Mr. Williamson, of Lochinvar, they purchased the two Princesses of that name, the 21st and 22nd, both by Weston Duke of Wongan. Other purchases were Lady Derrimut 9th, calved December 1918, sired by Lord Derrimut 2nd from 161st D. of D. at 225 guineas. Rugia Niblett 41st (a name to conjure with), got by Bullengarook D. of D. 4th, and an aged cow by Rotherfield Emperor, imp. (82121), dam Bolinda D. of D. 297th. Rotherfield was closely related to that famous Welsh Gem, champion of Great Britain.

A most important addition to the already large number of females was that of six aristocratically-bred heifers exported to Australia by Messrs. Evan Jones and Sons, all entered in Coates' Herd Book. These were:—

Lichfield Lass, roan, calved March 1917, bred by A. S. Berry, Thenstone Hall, by Lichfield Duke 21st (131923), dam Lichfield Duchess 20th, her 16th dam being by that pillar of the old-time Shorthorns Waterloo (2816), price 300 guineas.

Cotehay Ringlet, roan, calved May 1917, bred by Col. Fairfax Rhodes, Brockhampton Park, sired by the expensive Edgecote Hermit (130828), dam Roan Ringlet by Better Times (101527), 8th dam Village Romp by that great bull Village Beau (87631). Quite a number of very famous English sires appear in her pedigree, and the price was 250 guineas.

Rose of Chedglow 50th, roan, calved March 1918, bred by Hugh Baker, Chedglow, Wilts, sire Grand Champion (120527), dam Rose of Chedglow by Edgecote Frenchman (115264), her 2nd dam by Ascott Gift, her 8th dam Rose of Oxford by the historical Duke of Oxford 4th, and her 20th dam Phoenix, the dam of Favourite (252), price 320 guineas.

Aikbank Madeline 2nd, red, calved November 1918, bred by John W. Barnes, Aikbank, Cumberland, sire Monarch (138038), dam Madeline 4th by Monoplane (121649), her 13th dam being Phoebe by Rennie's Romulus, price 250 guineas. A friend of the writer's, who saw many of the best herds in Great Britain, considered Mr. Barnes' one of the very best he saw there, and bought one of his bulls. He invariably realises high prices for them. The late Mr. George Baker, a well-known judge and breeder, owned Aikbank Stamp, and his son on no account would part with him.

The fifth heifer was Somerville Charming Duchess 18th, a red, calved April 1918, bred by W. Fitzherbert, Aston, Somerville, Broadway, Glouc. Sire Latton Goldsmith (137471), dam Somerville Charming Duchess 6th, g. dam S. C. Duchess 3rd by Adbolton King Beauty. Her 15th dam was the noted Sylph by Sir Walter (2637), tracing back to Rachael by Comet, thence back to Hubback (319).

The sixth heifer Messrs. Lord Bros. got was Village Pansy 2nd, roan, calved December 1917, bred by the late Capt. R. H. Leyland, Ampney Crucis, sire Village Oak (113626), dam Aldsworth Pansy by Nonpareil Gift (109536), g. dam Village Perfection by Village Beau (87631), a very famous sire and prizewinner. Favourite (252) appears twice, her 20th dam being the beautiful Lady Maynard.

All these six females are entered. Three are entered in Coates' Herd Book, Volume 64, and the other three in the 35th volume. They have been served by bulls entered in C.H. Book, therefore Messrs. Lord Bros., with ordinary luck and fair seasons, can reasonably expect to have some phenomenal results.

The sires at the head of Messrs. Lord's high-class females are Tuppal Duke of Derrimut 31st, calved November 1916, sire Cherry Oxford Duke 3rd, dam Bolinda Duchess of Derrimut 367th. Mr. Falkiner refused 1200 guineas for him when a yearling.

Then comes that handsome fellow Clifton Cherry Colonel, a beautiful roan in colour, bred by that breeder of high repute, A. J. Simpson, and which cost the owners 1000 guineas privately last Sydney show, where he was a prizewinner, as well as at Brisbane. He was sired by Grand Duke of Clifton 5th by the famous 40th, his dam being Cherry Queen of Clifton, by that great sire the 128th, that all Victorian breeders swear by. The 5th herein mentioned is a full brother to the Yandilla successful sire and champion of the name.

Other sires purchased at high prices are Wilgul D. of D. by Bolinda D. of D. 400th, dam Wilgul D. of D. 344th; Wilgul

D. of D. 12th, by the same sire, dam Wilgul D. of D. 12th; Widgiwa Duke of Binnia by Bolinda D. of D., dam Duchess of Widgiwa 4th; Noorilim Baronet, of the same blood; Earl of Wyndham, calved 1912, bred in N.Z., sired by Summerton Florist, 2nd dam Riby Duchess 24th. He came with a great reputation to Sydney, where he obtained first prize, and sold for 310 guineas to Messrs. Lord. He has a splendid back and middle piece, and is a beast that would have taken the eye of the late Mr. Baldwin.

Messrs. Lord, however, intend only to use the Derrimut bulls with their highest class females, in which I think they are erring, for in my opinion both this beast and Rosehaugh Matador (imp.) should have a few each of the best to see how they would nick as an outcross. This Rosehaugh Matador, a red roan, is a very thickly-fleshed solid bull, and cost that good judge and breeder, the late Mr. George Baker, 750 guineas. He had a very high opinion of him, and was only parted with by his son through the whole stud at Laura being sold to make room for sheep. He had a lovely thick, mossy coat when seen by the writer in the summer, but he lost this in keeping with English seasons.

In addition to those mentioned in this article, Messrs. Lord have a number of other good cows, both pedigreed and unpedigreed, for the purpose of breeding herd bulls. The country being so good, and the locality being so much nearer to the big herds, where bulls are required, should give these pushing young breeders a great advantage over those in the inside areas.

Since the foregoing was written Messrs. Lord Bros. attended the sale of the famous Yandilla Shorthorns, and there secured the cream of the females, including Clifton Cherry Queen, red roan, bred by A. J. Simpson, Clifton, Victoria, 7 years old, by the celebrated 40th, dam Cherry Queen of Clifton 2nd. Competition for this great cow was keen in bids of 25 guineas, and it was not until 515 guineas was reached that she fell to Messrs. Lord. It may be mentioned that her daughter by the 33rd, four years old, herself a prizewinner, was knocked down at 360 guineas to Messrs. Coughlan Bros., of Quat Quatta; another daughter, a year younger, fell to Hopkins and Co. at 250 guineas, and a 2-year-old son to the Queensland State Stations for 260 guineas. Messrs. Lord were forced to go to 330 guineas for that lovely 5-year-old cow, Yandilla Grand Duchess 8th. She was first Brisbane and reserve champion 1918, and won two firsts and champion 1920. She was sired by the champion Grand Duke of Clifton, from the Baldwin cow Spicy Pearl by Spicy Peer 2nd. This cow's bull calf, a prize winner, 11 months old, made 200 guineas, sold to Mr. C. J. Brabazon, Elderslie, N.Q. Messrs. Lord also secured Yandilla Duchess of Derrimut 1st, by the 52nd, from Webb's 56th, by the 33rd, 7 years old, for 170 guineas (two of this cow's daughters realising 205 guineas and 155 guineas); also the 56th herself, 9 years, and another daughter, Y.G. Duchess 26th, 3 years, at 155 guineas.

Yandilla G. Duchess, roan, 6 years, by Grand Duke of Clifton from the 151st, bred by John James, price 150 guineas, fell to them, as did Yandilla Beverley Duchess 3rd, 8 years. The grand old cow, Baldwin's Model, aged 14 years, bred at Durham Court, joined Messrs. Lord's lot, and Rugia Niblett 44th, roan, 8 years, bred by Trustees late J. H. Angas, and sired by imp. Adbolton Thalia King, completed their purchases.

Masterton (N.Z.) Ram Fair.

The annual stud ram and ewe fair at Masterton attracted a large attendance of breeders from all parts of New Zealand, but the bidding was not brisk, and many lines were passed in. The highest bid obtained for Romney rams was 100 guineas each for a pair bred by Messrs. W. Perry & Sons, who last year secured 270 guineas for Romneys. The Penrose line sold at 27 guineas to 100 guineas, and others from the reserve (25 guineas) to 70 guineas. The majority of the Lincolns were passed in, the top price being 70 guineas for a ram bred by Mr. H. R. Poole. Others made 30 guineas to 60 guineas. Romney ewes sold at 3 guineas to 6 guineas.

Importation of Stud Stock into New Zealand.

Owing to the strictness of the regulations at Home concerning foot and mouth disease, which is now more prevalent in England, few stock have been imported into New Zealand of late. At a meeting of breeders and exporters held in London in October, the regulations governing the export of live stock were discussed, and as a result of the meeting a proposal was put before the New Zealand Government through the High Commissioner. This was that animals from known clean areas should be segregated in Liverpool for a period of 14 days. If at the end of that time no signs of disease in the animals were apparent, and there were no epidemic outbreaks of foot and mouth disease in the United Kingdom, nor further outbreaks of foot and mouth disease at points of origin of the stock or in the Liverpool area, they should be shipped by the first available vessel. The New Zealand Government approved of this regulation, and made the necessary arrangements for veterinary supervision over intending shipments through Mr. Alex. Crabb, the New Zealand Government Veterinary Inspector in London. As a result of the new regulations the "Waikouaiti" has arrived at Wellington with a shipment of twenty-three head of cattle, six sheep and three pigs. Among the stock is a Shorthorn bull for the Knapdale estate, an Aberdeen-Angus bull consigned to Messrs. Murray, Roberts and Co., Wellington, as agents, and six Aberdeen-Angus bulls and eight heifers consigned to Wellington for Mr. F. Armstrong. The New Zealand Loan and Mercantile Agency Company is shipping a Red Poll and a Shorthorn bull, and Dalgety and Co. Limited a Southdown ram from Sir J. Colman's estate, Gratton Park, Surrey, to the order of Mr. James Knight, of Feilding. In addition to the above, four Border Leicester sheep are being sent to Mr. H. F. Nicoll, of Ashburton.

British Live Stock Interests.

LONDON, 23rd December, 1920.

The Smithfield Show.

The annual show of the Smithfield Club has been held this month at the Royal Agricultural Hall, Islington, when the entries almost regained pre-war level in point of numbers, the quality of the stock in general, and of the principal prize winners in particular, being equally satisfactory.

The premier beast was adjudged to be Mr. J. J. Cridlan's Aberdeen-Angus steer Eros, now 2 years 8 months old, and scaling 14 cwt. 3 lbs. In securing this, the blue ribbon of fat cattle breeding, Eros won for the Angus breed its 17th victory at Islington, and also reversed the decision at the Birmingham Fat Stock Show, reported last month. For the runner-up at Smithfield was Sir Richard Cooper's cross-bred heifer Blue Bell, a blue-grey by an Aberdeen-Angus bull. At 2 years 8 months and 5 days Blue Bell outscaled the winner, Eros, but lacks something of that indefinable "quality" that appeals to the umpire, who had to be called in finally to decide between the judges. Eros also won his breed special and the £50 cup for the best steer in the show.

The King's Challenge Cup for the best beast in the show, for which Mr. Cridlan's and Sir Richard's winners could not compete, went to Sir Richard's white Shorthorn heifer Ruby Queen VI. (13 cwt. 0 qr. 19 lbs.).

The Short-woolled sheep championship, open to twelve distinct breeds, fell to Lady Fitzgerald's pen of 1919 Southdowns, their weight being 5 cwt. 1 qr. 7 lbs.; they were trim and beautifully fed specimens. Reserve to them was Mr. V. T. Thompson's Hampshire Downs (1919) 7 cwt. 9 lbs. The Longwool sheep championship (open to nine breeds) went to a 1919 pen of Leicester wethers (8 cwt. 1 qr. 12 lbs.), exhibited by the executors of the late E. T. Jordan, a trio of sterling merit. Reserve to them were Mr. W. M. Cazalet's Romney wethers (1919), weighing 7 cwt. 12 lbs.

A battle between the Southdowns and Lincolns was witnessed for the Prince of Wales Challenge Cup for the best

pen of three sheep in the show, which resulted in the neat little sheep of the Sussex Downlands securing the award.

Coming to the class awards, and taking cattle first, I thought the Devons a choice show, being better than for many years past. Four classes were provided, which secured 13 entries. The breed special was given to Mr. Wendell's Upcott Daisy 23rd, reserve being Mr. Morris' Highfield John.

The Herefords shown were of very creditable merit, especially the first prize bullocks, two of the classes being very strong—junior steers and heifers. The breed special went to Messrs. Weston's Bounds Cinderboy, winner in the senior steers, and reserve being Mr. O. Williams' Crossways Opal, winner in the junior heifers.

Shorthorns were below their usual level, both in numbers and in quality. H.M. the King won in yearling heifers with his only entry of this breed from Windsor, Windsor Lady, a pretty specimen. The senior heifer class produced two entries—Sir Richard Cooper's Ruby Queen 6th (breed champion at Birmingham and first at the Royal) and the Duke of Portland's Norwich supreme champion Welbeck Lass, both white in colour. The umpire was called in, and gave his award to Sir Richard Cooper's heifer, which also won the breed cup, reserve being the King's exhibit. In junior steers Mr. Cazalet was first, and in senior steers Mr. J. D. Fletcher.

One class was devoted to the dual purpose Lincoln Reds, for steers under three years old, but only a solitary exhibit was entered—Lt.-Col. Sir A. G. Weigall's Petwood Ranby, an 18 months youngster, which well deserved the award given.

All four classes of Sussex produced excellent quality, and made a good show. Mr. B. Steel secured the breed championship. Though the exhibits of Red Polls were about one-third less than usual, the quality was excellent. H.M. the King won all three classes with his exhibits, and also the breed cup.

A splendid muster of Aberdeen-Angus constituted one of the strongest classes in the show, and secured the premier award of the exhibition. The junior steer class, in fact, was the biggest at Islington, 15 entries coming forward. As already stated, Mr. Cridlan's gay prime steer Eros took the breed championship, reserve going to Mr. Bailey-Hawkins.

Crossbreds were divided into two classes—first cross and second and third crosses. First crosses were comparatively few in number, and not of outstanding quality. The best section was that for second and third crosses.

Two classes were provided for each of the breeds of sheep—one for fat wether lambs and one for fat wether sheep. Considering the Longwool department first, Leicesters mustered an entry of eight in the two classes. There was not such keen competition in Lincolns as in the past, only two flocks, those of Mr. A. T. Pears and O. S. Mosley, being represented. The former won with some splendid pens in both classes, and also took the breed cup, his winning pen of lambs being reserve.

Some strong classes of Romney Marsh wethers and lambs provided pens few of which have been better at Smithfield. Close competition was noted in the lamb class, where ten entries were forward. Mr. O. C. Millen was first and third, second being the Hadlow Flock Company. Seven entries for wethers were led by Mr. W. M. Cazalet's pen, second being Messrs. L. H. and G. W. Finn, and third Mr. H. B. Amos.

Coming to the short-woolled classes, Southdowns provided the leading feature in the sheep section, there being twelve entries in both the lamb and sheep departments, Lady Fitzgerald and Lady Ludlow showing some splendid pens. The lamb class in Hampshire Downs was the largest in the show, consisting of thirteen entries.

Suffolks showed well, no less than eleven pens being forward for wether lambs. Sir E. Cassel's winning pen, which also took the breed cup, was the heaviest pen in the show, scaling 5 cwt. 3 qrs. 10 lbs.

No Oxford Down wethers came forward, but three exhibitors competed in the lamb class. Mr. H. W. Stilgoe took first and reserve awards. His leading pen well deserved the breed cup. Ryelands were represented by a rare display of wether lambs, comprising six entries. Ryelands and Kerry Hills had a joint breed cup, Mr. J. G. Rowett, a breeder of the former, securing this.

Crossbred sheep had eight classes allotted to them, but competition was only a shadow of that seen in former years. The short-woolled classes were the best filled, and Mr. F. Salisbury's pen of Hampshire Downs-Oxford cross finally secured the breed cup.

The entries in the carcass competitions were not so numerous as at previous shows. Once more did a crossbred beast of the Angus-Shorthorn cross prove the best, and in the mutton carcass events the Southdown again won.

At the sale of carcasses beef made up to 26s. per 8-lb. stone. Top price for lamb was 50s., given for Mr. A. Holland's champion Southdown carcass.

Prices paid for live cattle at the show this year were not so high as last year. This year the figures were mainly in the neighbourhood of £200, although in one case £300 was given; last year the top price was £375 a head.

Some Cattle Sales.

Mr. Owen Williams disposed of a large number of his well-bred Hereford herd at Crossways, Cowbridge, Glamorgan, this month, when a good average price of 115 guineas per head was realised. The top figure paid was 550 guineas, which was given for Bodenham Gallant, a 1917 bull. Top price among the cows and heifers was 300 guineas, which was given on three different occasions.

On account of the death of the owner, the South Devon cattle and South Devon sheep of the late Mr. Edward Stooke were sold this month at East Sherford Farm, Brixton, Devon. The highest price paid was 160 guineas, which was given for the 5-year-old cow Sherford Dandy 9th. In all, the 28 females sold for 2189 guineas. The 135 registered South Devon sheep averaged 9 guineas apiece.

This year's last sale of Red Poll cattle was that of Mr. A. Davitt's, at East Grinstead, when 38 head sold for £3767 in all. Top price for females was 310 guineas, given by Mr. J. B. Dimmock, who was also a purchaser at 250 guineas.

Live Stock Exports.

The aggregate declared value of the live stock exported overseas last month from this country is returned at £511,462, which brings the total for the eleven months of 1920 to £4,406,264. The detailed figures are as follows:—

Cattle	442	£106,216
Sheep	102	3,030
Pigs	39	2,124
Horses	6,780	359,153

The feature of the cattle exports is the large demand from North America; 171 went to Canada and 188 to the United States, as compared with none in the same month of last year. Argentina took 28, and Australia 3.

The small number of sheep exported is accounted for by the existing restrictions on imports to Canada, the United States, Argentina and Uruguay. However, 31 went to the Argentine, and the remaining 71 to countries not separately enumerated.

The whole of the pigs sent abroad last month went to "other countries," according to the official returns.

Of horses sent overseas, Holland imported 1638, Belgium 3143, and France 1289.

Two Hereford bulls and three heifers were recently sent to Jamaica by Messrs. Alfred Mansell and Co., the well-known Shrewsbury exporters.

Mr. R. W. Wright, of Thorncastle, Transvaal, is returning to South Africa with some choice Red Polls, with which I understand he is starting a fresh herd. His heifers, particularly, are well representative of the dual purpose type of Red Poll.

Messrs. John Thornton and Co. are sending to Queensland three well-known Red Poll bulls, these being Royal Farmer, from the King's Sandringham herd; Shotford David, from Mr. J. B. Dimmock's herd; and Red East, the property of Mr. H. P. Blomfield. I hear that further exports of Red Polls are shortly to be made to New Zealand, Brazil and Argentina.

A cable recently received here from the Argentine gives British cattle exporters something to remember. After the 1st March next it is stated that cattle arriving in the Republic must be accompanied by a photograph, signed by the breeder, and attached to the pedigree certificate, otherwise the stock will not be registered in the Argentine Herd Books. It is also stated that all pedigree cattle which are not tattooed in the ear with their home tattoo number, which must be inscribed on the pedigree certificate, and must correspond with the number in the ear, will not be allowed to be entered in the Herd Book.

FLOCK COMPETITIONS.

The results of the flock competitions of the Romney Marsh and Southdown Sheep Associations are announced to-day:—

Romney Marsh.

Coronation Cup for Champion Flock.—1, W. Miskin; 2, Lt.-Col. Body.

Flocks of 500 Ewes and over.—1, W. Miskin; 2, Messrs. L. H. and G. W. Finn; 3, A. Finn; reserve, Ashley Stevens.

Flocks of 200 and under 500 Ewes.—1, Lt.-Col. J. Body; 2, R. S. Strouts; 3, S. Sumford; reserve, Messrs. F. and B. Collard and Sims.

Flocks under 200 Ewes.—1, H. T. Greensted; 2, W. M. Cazalet; 3, H. Newman; reserve, E. T. Hammon.

Southdowns.

Flocks of 250 Ewes and over.—1, Rev. C. H. Brocklebank; 2, W. Langmead; 3, E. Hogben; reserve, H. F. Plumtre.

Flocks of under 350 Ewes.—1, Sir Jeremiah Colman, Bt.; 2, Sir Richard Glyn, Bt.; 3 (equal), Sir Richard Garton and the Earl of Derby; reserve, Robert Blenkarn.

Murgha Merinos.

Important Dispersal Sale.

The dispersal sale of the Murgha Merino Stud, held on the station, Deniliquin, N.S.W., on 3rd February, attracted buyers from all States and Africa. Excellent all round prices were realised. 672 special labelled stud ewes sold to 54 guineas, and averaged £18 3s. 2d.; 150 special stud ewe hoggets averaged £17 19s. 4d. per head; 1151 double stud ewes averaged £4 12s. 10d.; 1142 double stud ewes averaged £6 13s. 11d.; 3808 single stud ewes averaged £3 15s. 11d.; 1397 double and single ewe hoggets averaged £3 14s. 11d. At the conclusion of the sale of the ewes 248 stud rams were sold, the top price paid being 700 guineas, by the Australian, Mercantile, Land and Finance Company Limited, Barratta Station. The whole 248 rams averaged £40 8s. 1d. In all, 8574 sheep were offered, and sold in four hours, making the splendid average of £6 14s. 4d. per head.

Carwell Merinos, N.S.W.

A New Stud.

Carwell Station, in the Coonamble district of New South Wales, the property of the Carwell Studs Limited, is ideal stud sheep country lying in the same belt as, and very similar in character to, Haddon Rig. The present owners acquired it in February 1920, when they bought from the estate of the late A. J. Austin a total of 5000 to 6000 breeding ewes, including all those formerly on Neyliona, near Jerilderie, a property of the estate that was sold in the previous year—and a number of surplus aged breeding ewes from Murgha. To these are now being added a large number of valuable ewes and rams purchased at the Murgha dispersal sale early in February. These include 33 two-year-old special stud ewes running up to 42 guineas, seven four-year-old ditto at 20 guineas, 74 five-year-old ditto to 54 guineas, 59 aged ditto to 7 guineas, 53 special stud ewe hoggets to 17 guineas, 527 first double stud ewes, 151 double stud ewes, and 330 double and single ewe hoggets. The rams bought at the Murgha sale were three of the ten leading proved sires used in the stud, and 58 other special stud rams, including 16 two-year-olds and 21 one-year-olds. From this it will be seen that the Carwell Merinos are a direct off-shoot of pure Murgha-Wanganella blood.

Stud Stock Notes.

SHEEP.

Mr. J. F. Guthrie, Corriedale Park, Wagga, N.S.W., has sold 23 one-year-old stud Corriedale ewes to the Japanese Government.

Volume XVI. of the Flock Book of British Breeds, Merinos, Corriedales, and Half-breeds in the South Island of New Zealand is to hand. The book is published by the council of the New Zealand Sheep Breeders' Association (South Island).

A consignment of Corriedale sheep left Arrawatta Station, N.S.W., belonging to Mr. T. Bowling, last month for Japan, being the second consignment bought from that stud for the Japanese Government. It consists of 45 2-tooth stud ewes at 12 guineas, and 75 2-tooth stud ewes at 7 guineas, and 2 stud rams at 25 guineas.

Foot and mouth disease is evidently no respecter of pedigrees. "The Agricultural Gazette" reports that Lord Melbourne's

flock of stud Southdowns at the Home Farm, Betteshanger, Kent, recently became affected, and had to be destroyed. The stud had taken 20 years to build up, and numbered over 800 animals, and was valued at £8000.

The top price for Merino rams at the sales held in connection with the International Show, Buenos Aires, last September was £880, which is a record for a Merino in Argentina. The first prize pen of yearling ewes fetched £210 each, while £240 each was refused for the first pen of 4-tooths. Eight selected yearling ewes were sold privately for £208.

The Singleton Romney Marsh flock, owned by Mr. R. S. Strouts, Great Chart, Ashford, Kent, England, will be offered for sale on the last Wednesday of September. The flock ranks amongst the best of its breed, and has been fully recorded since 1882. Mr. W. W. Chapman, of 4 Mowbray House, Norfolk-street, Strand, London, will be pleased to execute commissions and arrange shipments on behalf of Australian buyers.

At the Palmerston, Otago, N.Z., Show last month, Mr. J. A. Johnstone, Bushey Park, was very successful with his sheep exhibits. With Corriedales he only showed rams, securing three first prizes, and the championship for the best ram on the ground, as well as three seconds and one third prize. In Romney Marsh sheep he carried off the championship for a ram bred at Bainfield by Mr. W. D. Hunt, also three firsts, three seconds and a third prize.

Recent files of American papers report some substantial sales of U.S.A. bred Merino sheep to other countries. These include 200 Rambouillet rams from one breeder to Argentina, and two Vermont rams from another for shipment to South Africa. "The American Sheepbreeder" for December states that Mr. P. S. Cloete, the South African breeder, is determined to obtain the best five stud Rambouillet rams and twenty ewes in America. Apparently with this object in view he asked Messrs. F. S. King Bros. and Co. to put a price on their champion Majestic Junr. They quoted \$10,000, say, £2000. Business is not reported.

At the sale of the Murgha Wanganella stud on the 3rd February, the Sheep Stud Company of Coonamble were extensive buyers of high-priced rams and ewes to add to their present stud, which is pure Murgha blood. They bought special stud rams at 340, 210, 170 guineas, and stud ewes at 54, 21, 17 and 10 guineas. The origin of the Stud Sheep Company's stud was 1500 pure stud Murgha ewes with rams, purchased from the late A. J. Austin in 1915 by the Mellool Irrigation Company, and on the sale of Mellool Station the stud was purchased entire by the Stud Sheep Company. There was a preponderance of Sir Charles blood in all the ewes purchased, and none but pure stud Wanganella rams have been used with them since.

The third annual sale of rams and ewes from Mr. Ernest Short's Parorangi Romney Marsh flock was held at Palmerston North (N.Z.) last month. The supply exceeded the demand, and a number of lots were withdrawn. Only a few of the best stud rams drew keen competition, and these were taken by Mr. E. Riddiford, of the Lower Hutt, at 100 gns. (top price for the day), 85 gns., 70 gns., 52½ gns., and 50 gns. The only other high-priced ram fell to Mr. L. I. McLean, of Waituna, at 81 gns. Other good rams sold at from 25 gns. to 35 gns., better sorts making up to 40 gns. Of the 500 one-shear flock rams, a large number were passed in, the best making to 11½ gns. Eighty two-shear Romney ewes changed hands at 2½ to 3½ gns.

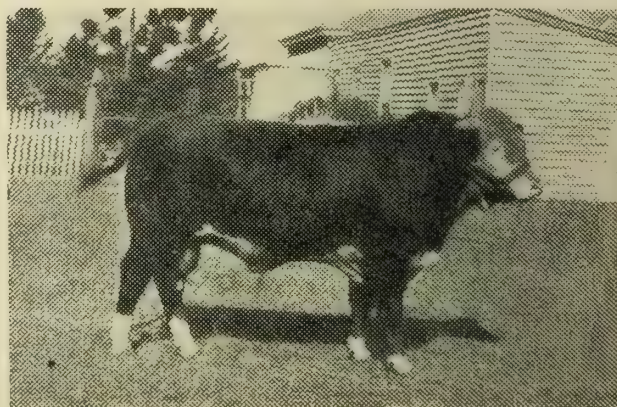
Messrs. H. H. Wettenthal and Sons, of Carr's Plains, via Stawell, Victoria, report the following recent sales:—Messrs. G. H. Kennedy, Werna, North Queensland, 30 selected Ideal rams; Messrs. A. and R. McCrae, Fairburn, via Armidale, N.S.W., 20 special Ideal rams; W. C. Kinnersley, Mininera, 11 Ideal rams; through Australian, Mercantile, Land and Finance, to the Argentine (fourth lot sent there), 2 extra special Carrsdales, and 5 Ideals, extra special; Mr. M. M. Weston, Shene, Tas., 1 stud Carrsdale; Mr. F. J. Hadden, The Grange, Tas., 8 special Ideals; Mr. J. P. Lempriere, Wadenhoe, N.S.W., 32 Ideal specials; Mr. F. J. Flayvel, Rainbow, 4 Carrsdales; Mr. Thos. H. Grace, Birchip, 2 Ideals; Mr. John Loxton, 2 Carrsdales; Messrs. Ryan and Howly, Axedale, small lot flock and special Ideal rams; Mr. A. H. Wettenthal, 7 Ideals; through Messrs. Mitchell Bros. and White, Warracknabeal, small lot Ideals; Messrs. Lehman Bros., Horscham, small lot Ideals; Messrs. Walter Hardy and H. Morton,

Condah, small lot selected Ideals; Mr. Chas. E. Weidemann, small lot Carrsdales.

Mr. Chas. Goulter, of Hawkesbury, Blenheim, N.Z., has won outright the £50 cup offered by the Canterbury A. and P. Association in the Merino competition, having won it for 1920, which makes three years in succession. The conditions governing the competition are that each exhibitor is required to enter three Merino rams not more than one year and four months old on the 1st November, which is just before the show, and all rams must be bred by exhibitor. The conditions then set out that all the rams entered will be exhibited at the show, and will be inspected by judges appointed by the committee, who will be instructed to disqualify any ram not considered by them suitable for stud purposes; rams so disqualified (if any) will not be allowed to compete in the competition. The qualified rams will be taken charge of by the committee, shorn and grazed as the committee may deem desirable, but at the owner's risk. The rams will again be exhibited at the association's show in the following year. They will then be shorn as the committee may deem desirable. The fleeces will then be valued in the grease by experts appointed by the committee, the fleece showing greatest money value to be declared the winner. The rams are fed for the year in the same paddock. Similar competitions are held for Corriedales and half-breeds, and in 1920 were won by Mr. Hugh Ensor, Rakahuri, and Mr. Jas Stevenson, Flaxton, respectively.

CATTLE.

Mr. Colin Campbell, Jerula, Cowra, N.S.W., has sold two Short-horn bulls to Mr. Mooney, Wollamundry, Condobolin.



HEREFORD BULL, GISBORNE VICTOR, 16 MONTHS.

By Eton Premier (imp.). Bred by Mr. J. A. Beattie, Gisborne Park, Victoria, and to be sold by him at the Sydney Show Sales.

Messrs. W. H. Yelland and Sons, Treverder, Vic., report having sold a young stud Hereford bull, Bonar Law, to Mr. A. E. Bowman, of Bethanga Park, at a good price.

Mr. F. W. Harding, Anoka Stock Farm, Waukesha, U.S.A., in November sold his Shorthorn stud bull Rosewood Sultan by auction for £1400, and Clipper Sunset for £1250.

From Captain R. T. Hinckes, the noted Hereford breeder, of Mansel Court, Hereford, England, comes a useful little calendar, with a picture of his three first-prize yearling bulls.

Mr. C. Mead, of Essex, England, at a recent auction sale sold a four-year-old Friesian cow, Sparrowycke Desire, for 1000 gns. A bull calf, Sparrowycke Record, went for 750 guineas.

Plitt, Son and Badgery Limited remind their friends and clients that entries for the Sydney Royal Show close on Monday, 21st February. The annual sale of stud cattle held in connection with the fixture commences on 22nd March, and the firm will be glad to receive early particulars from sellers.

LITTLE'S DIPS

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H. Donkin & Son, Queen Street, Brisbane.
Goldsbrough, Mort & Co. Ltd., Rockhampton.
Burns, Philp & Co. Ltd., Townsville.
Geo. Ferguson & Co., Port Adelaide.
Henry Wills & Co., Fremantle and Albany.
De Garis Sons & Co. Ltd., Narracoorte, S.A.
AND ALL STOREKEEPERS.

Figures compiled by the "Live Stock Journal" show that since 1869 the champion plate for cattle at the Smithfield Show has been on twenty times by the Shorthorn breed, seventeen by the Berdeen-Angus, and three each by Devons and Herefords.

Mr. Anthony Hordern, Milton Park, Bowral, N.S.W., has recently sold two young Shorthorn bulls to Mr. Mooney, Conobolin. They are both sired by Milton's Lord Vandyke, a red bull sold at the last Sydney Royal for 320 guineas. These two young bulls are very promising indeed, and should do well with their new owner.

Although Mr. J. A. Johnstone, of Bushey Park, N.Z., only entered the lists as a breeder of stud stock last year, he was very successful at the Palmerston, Otago, Show in January. In the Shorthorn cattle he was awarded the championship for an exceptionally good yearling dark roan bull, bred on McNab's Napdale Estate, and in addition he secured four first prizes, one second and one third.

Mr. W. D. Hunt, a successful breeder of Friesian cattle in New Zealand, when recently on the other side, visited Holland, and was much interested in the cattle he saw there. He found that the Dutch were concentrating largely on a dual-purpose animal for beef and milk—whereas in New Zealand the prime object was milk production. The Dutch were also great stickers for type, and the markings being held to be of considerable importance in this respect.

No striking prices were obtained at the sale of stud stock held in connection with the Chicago International Live Stock Exposition, U.S.A., last December. The top figure, £1240, was made by the Hereford bull Kirk Fairfax, sold by Mr. F. P. Cox. The Shorthorn cow Lady Supreme, sent in by Mr. F. Schofield, fetched £1120, and another, Miss Snowbird Sultan, exhibited by Messrs. Carpenter and Ross, £1000. The best price paid for Shorthorn bulls was £1000 for Mr. F. Schofield's Silverheart.



EIGHT-MONTHS-OLD HEREFORD BULL CALVES.

Bred by Mr. J. A. Beattie, Gisborne Park, Victoria. These calves are by Royal Boy 4th and are to be sold at the Sydney Show Sales. Royal Boy 4th will also probably be offered.

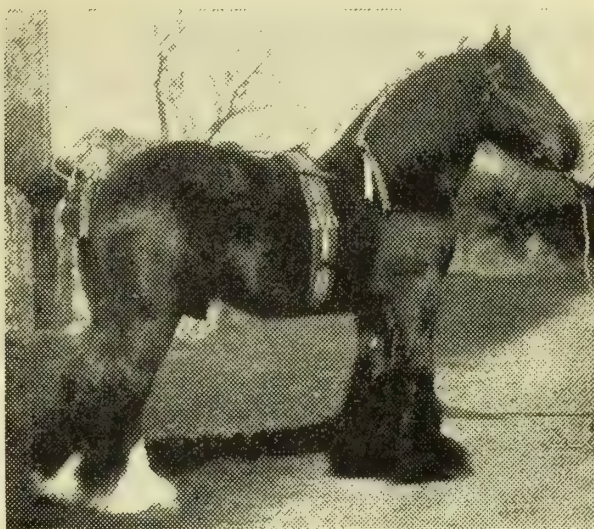
Mr. J. A. Beattie, Gisborne Park, Vic., has made the very sensible move of having his whole Hereford stud herd and dairy foster mothers tested for tuberculosis, and has received the following tuberculin certificate:—"This is to certify that I have just completed testing with tuberculin the stud of pure-bred Hereford cattle, the property of John A. Beattie, Esquire, Gisborne Park, Gisborne, Victoria, and found the same to be sound and free from tuberculosis. In addition to testing the stud, Mr. Beattie adopted the wise precaution of testing all dairy cows used as foster-mothers (32), and none of these reacted. I, therefore, have much pleasure in certifying to this stud farm being completely free from tuberculosis.—(Signed), H. S. Rudduck, Veterinary Surgeon." Such a guarantee as the above affords would prove of great value to stud cattle breeders in facilitating export trade, of which we believe there is considerable likelihood with South Africa in the near future.

HORSES.

Mr. Joseph Watson, of Sudbourne, Suffolk, Eng., has sold a Suffolk Punch stallion, Sudbourne Foch, for the record price of 2200 guineas. Mr. A. G. Welch, Worlingham, Beccles, England is the buyer.

Mr. Allan McFarlane, Wellington Lodge, East Wellington, S.A., reports having sold one gelding and four fillies by the thoroughbred Kerlie, and one gelding and filly by the thoroughbred Lowult to Victorian and South Australian buyers.

The Clydesdale Stud Book of the United Kingdom, volume XLII., containing pedigrees of mares having produce previous to 30th September, 1919, and stallions foaled before 1st January, 1919, is to hand, and can be inspected at the Melbourne office of The Review.



SHIRE STALLION, SUSSEX GOALKEEPER, 5-YEAR OLD.

Sold by Mr. E. C. Fairweather, Avisford Park, England, for 3300 guineas to Mr. F. W. Cope.

Mr. J. A. Johnstone, Bushey Park, carried off several of the awards in the Clydesdale section at the Palmerston, Otago, N.Z., Show last month. In the class for brood mares with foals at foot, he won second and third prizes for two grand mares, the one, Helena, a beautiful bay mare of great substance, style and quality, got by the imported horse Bancor (11253), with a rare quality filly foal at foot by Mr. James Patrick's Baron Bold (40). By very many of the spectators this mare was regarded as the best on the ground. The other mare was Phoebe, by another imported horse that has proved himself one of the best ever landed in New Zealand, namely, Baron Everest (13885). This mare had at foot a handsome colt by Mr. James Wyllie's imported horse Baron Threave (18187).

GENERAL.

Moreheads Limited, the Brisbane firm of stock and station agents, &c., wish it to be known that they specialise in the sale of stud stock. Sales can be arranged and conducted in any part of Queensland.

Dalgaty and Co. Limited are already getting ready for their annual Brisbane sales of stud cattle and stud and flock sheep, which are held in August, during the Exhibition week. The firm invites consignments from old friends and new.

Island Tales, by Jack London. (London: Mills & Boon; price, 7s. 6d. net.) Another posthumous volume from the pen of Jack London, which really makes us realise what a sad loss the author's death was to the novel-reading public. All the old familiar qualities of his art are here, physical strength, robust adventure, and creatures of passion and endurance. The scenes of the seven short tales are in the Hawaiian Islands, and all lovers of the writer's work should get this interesting volume.

Sir Archibald Murray's Despatches (London: J. M. Dent and Sons; price, 35s. net). The work consists of the full text of General Sir Archibald Murray's despatches from Egypt and Palestine covering the period from June 1916 to June 1917, without the "cuts" necessarily made by the Government when they were published in the war period. A case of maps accompanies the volume. The stories of the laying of the railway from Kantara right into Palestine across the desert, the development of the water-carrying system across the same stretch, the building up of the Egyptian Labour Corps, &c., are intensely interesting, and will always redound to Sir Archibald's credit. The real controversial matter concerning the two Gaza battles is dealt with in the fourth despatch, and readers can therefore judge for themselves as to the reality of the General's grievance against the Government.

Lands.

Western New South Wales Leases.

Complaints reach us that the Western Lands Commission, N.S.W., recently gazetted a number of leases in the western division as open to application until 31st January. These attracted a large number of applicants, but, unfortunately, a number of men about Walgett were excluded from competition because no application forms were available at the Walgett Lands Office—the supply of forms had been used. The chairman of the Western Lands Commission was informed by telegram of the position of affairs, and requested to extend the time for receiving applications. He answered that the time could not be extended, but that applicants could make a typewritten copy of the original form, and that would be accepted. This did not help matters, as no original form could be had in the town.

On inquiry at the office of the Western Lands Commission it was ascertained that the lands referred to were gazetted on 16th December last. On 12th January the Crown Lands Officer at Walgett applied for a dozen extra copies of application forms, and 25 were sent him. The next heard about the matter was a telegram from a local resident, which reached the office of the commissioners after the train for Walgett had left on Friday afternoon, 28th January. To that communication the chairman of the Commission despatched the telegram referring to typewritten copies of the forms being accepted, and declining to extend the time for applications.

Queensland Repudiation Act.

Important Decision.

In the Land Court at Brisbane Mr. H. F. Hardacre gave an important decision regarding Stonington pastoral holding, North Kennedy district. The question of fixing the second period rent was set down for hearing at Charters Towers, but the preliminary objection was taken that the court had no jurisdiction, as the holding was a new lease formed by an amalgamation of three previous holdings, and that the lease, having been issued as from 1st January, 1916, still was in its first period. The Crown contended that Stonington was merely a continuation of the previous leases, and was in its second period. Moreover, it was held that the rent for the second period had been determined at the Charters Towers Court in April 1918, and if the court held that the rent then fixed was insufficient, it could determine it afresh for the second period.

Decision as to the legal point raised was reserved, and evidence was heard as to whether the rent already fixed was less than a sufficient rent, so that if it was considered to be less than sufficient, and the contention of the lessee on the legal point raised was not upheld, the rent could be redetermined for the second period.

Mr. Hardacre said:—

"I have now given careful consideration to the legal contention raised, and find as follows:—(1) The lessees of certain contiguous holdings known as Stonington, Boundary, and Manoa, agreed with the Secretary for Public Lands that the area held in the holdings referred to should be included in one and the same lease, and should be thereafter for the purposes of the Land Act of 1910 dealt with as one holding known as Stonington. (2) The lessees of Stonington, Boundary and Manoa holdings therefore surrendered the said holdings, which were referred to as the original holdings and became entitled to a new lease of the whole of the land comprised in the original holdings. (3) The new lease provided for a term of 22 years, and reserved the condition among others that the lessees should pay for that portion of the first period of 10 years until the date on which the yearly rent shall have been assessed and determined by the said Land Court, the yearly rent of £111 5s. 3d. being at the rate of £1 1s. 6d. a square mile per annum on the total area of the holding thereby demised, and thereafter for the remaining portion of the first period of the said term, and for the succeeding period, or periods, of the said term respectively, such yearly rent or sum as shall be assessed and determined by the Land Court in accordance with the Land Act of 1910. (4) The date of the new lease commenced on 1st July, 1916, and has therefore not yet completed its first period. (5) I determine, therefore, that the court has no jurisdiction to

enter into the consideration as to whether any rent determined for its second period is a sufficient rent, nor to determine afresh any such rent for its second period.

Land Sales.

NEW SOUTH WALES.

The date of the **Martindale Estate** sale, which is advertised in The Review, is now fixed for Friday, 18th March, at Muswellbrook.

Wargam Station, Booroorban, via Deniliquin, has been bought by Mr. W. E. A. Edwick, Aratula, Tocumwal, from the Exors. R. H. Woodward.

Braehour Estate, comprising 2819 acres, near Wagga, has been sold by the Trustees late J. A. Gunn to Mr. P. H. Lock, of Airlie, Warrnambool, Vic.

Marchmont, Yass, which has been in the Hume family for 80 years, has been sold to Mr. E. J. Merriman, of Ravensworth, an adjoining property.

Deltroit and Billapal Stations, two Gundagai properties, the former comprising 7000 acres freehold, and the latter, 8600 acres freehold, are advertised for sale at the Royal Exchange, Sydney, on 29th March next. Pitt, Son and Badgery Limited are the agents, from whom further particulars can be obtained.

Merool Creek Station, near Hay, comprising 36,162 acres freehold, C.P. and C.L. lands, has been sold by the Trustees, Executors and Agency Company Limited for the Estate of the late William Hawley, to Mr. Ambrose Hawley, who for 16 years has been managing the property. Walk in and walk out for cash.

VICTORIA.

14,160 acres of **Narrapumelap Estate**, Wickliffe, have been sold by Mr. G. M. Buckley to the Closer Settlement Board.

Burribr Estate, Lexton, comprising 3940 acres, has been sold by Mr. W. H. Hedge to Mr. A. E. C. Bennett, of Hamilton.

Strathnairne Estate, Rokewood, comprising 2436 acres, has been sold by Mr. A. E. C. Bennett to Mr. G. Ritchie on a walk in, walk out basis.

Bochara Estate, eight miles from Hamilton, containing 4600 acres, has been sold by Mr. J. McKellar to Mr. H. L. M. Beggs, of Leura, Hamilton.

Fernside Estate, Kobyboyn, near Seymour, is to be offered for sale at Scott's Hotel, Melbourne, on Thursday, 24th February. The property comprises a total area of 8667 acres freehold, which, over a period of ten years, has carried an average of more than a sheep to the acre, besides 300 head of Shorthorn-Hereford cattle. The agents are N.Z.L. and M.A. Company Limited, and Messrs. Macarthur and Macleod, Melbourne, and Heywood, Rose and Co., Seymour. An advertisement appears in this issue.

QUEENSLAND.

Emuvalle, situated near Petford (Q.N.R.), has been sold by Messrs. Abbot and Meehan to Mr. H. Bird.

Lucknow, situated in the Augathella district, comprising 15,453 acres grazing homestead, has been sold by Mr. Wm. Ware to Mr. S. Twist.

Ardnaree, in the Augathella district, comprising 9951 acres grazing homestead, has been sold by Mr. A. F. C. Slaughter to Mr. Jas. Twist.

Box Vale Station, in the Many Peaks district, comprising 14,000 acres, has been sold by Mr. Drynan, of Beaudesert, to Messrs. Wagner Bros., of Aranbanga, Gayndah.

Cleeve, in the Longreach district, comprising an area of 18,360 acres, together with 6000 sheep and twenty horses, has been sold by Mr. E. J. O'Mara to the Crossmore Estate.

Disney Station, comprising 184 square miles, together with 2415 cattle and 64 horses, and located in the South Kennedy district, some 100 miles north of Clermont, is advertised for sale at Rockhampton on 12th April. Moreheads Limited, Brisbane, Australian Estates and Mortgage Company Limited, Rockhampton, and Messrs. Appleton and Co., Clermont, are the auctioneers acting in conjunction.

WESTERN AUSTRALIA.

Minderoo and Hardey Junction, two well known Ashburton stations, are advertised in this issue for sale at the Palace Hotel, Perth, on 24th March. Minderoo comprises an area of 522,000 acres leasehold, and adjoins the town and port of Onslow, while Hardey Junction contains 343,000 acres lease, and is some 140 miles inland. Both properties are well improved, and will be sold with stock, mostly sheep, and all plant. The agents are Elder, Smith and Co. Limited and Dalgety and Co. Limited, Perth.

Record.

The Graziers' Association of New South Wales.

Council Meeting.

The quarterly meeting of the council of the Graziers' Association of New South Wales was held on 2nd February, when Mr. Jno. Mackay (president) occupied the chair. There were also present:—Messrs. N. W. Kater, J. B. Cramsie, V. Williamson, T. M. Scott, James T. Gavel, E. Killen, John Leigo, P. E. Stirton, W. W. Hedges, Wallace Hunter, J. R. Atkinson, J. B. Sautelle, J. M. O'Brien, C. G. Waddell, G. T. Esplin, George Main, C. A. Sinclair, A. G. Manning, Joseph Peacock, F. T. Payne, A. F. Manchee, F. B. Fleming, C. M. Buck, A. E. Hunt, H. S. McMaster, F. H. Coward, J. S. Crapp, I. W. Onslow Thompson, J. H. Wilson, E. D. Kater, Lionel Manchee, O. E. Friend, S. M. Osborne, W. W. Killen, D. Carson.

While hoping that the amendments which have been made to the Commonwealth Arbitration Act will lead to future shearing operations being carried out on award terms without industrial difficulty arising, a strong defensive policy was agreed upon, and some important proposals were referred to the next annual conference of the association for further detailed consideration. It was decided to give all possible support to contractors, shearers, shed hands, and other employees who last season worked upon the 48-hour basis in accordance with the existing award, and in conformity with the rules of the A.W.U. and the policy of the association. A report was submitted in connection with the Graziers' Co-operative Shearing Company Limited, which was established at the instance of the association some two years ago for the purpose of improving the organisation of shearing labour to the mutual advantage of growers and their employees. The report indicated that some very satisfactory work had been accomplished, justifying increased support of graziers in the future.

Consideration was given to the question of what action, if any, should be taken in respect of members who departed from the shearing policy of the association last season, but the question was referred to the annual conference.

Messrs. J. Mackay, O. E. Friend, and N. W. Kater were appointed to represent the association at the 32nd Convention of the Graziers' Federal Council of Australia, which is proposed to be held at Brisbane about 6th April.

Reports were presented by representatives of the association who recently attended conferences relative to carry-over wool and formation of the British-Australian Wool Realisation Association, crossbred wool clip, and increased manufacture of woollen goods in Australia. The secretary reported that representations had been submitted through the Central Wool Committee to the Imperial Government in favour of owners of wool shipped prior to the commencement of the Imperial Wool Purchase Scheme, and appraised in London, being allowed to participate in the distribution of profits made by the Imperial Government.

Counsels' opinions as obtained by the Federated Associations relative to taxation of growers' share of wool profits made by the Imperial Government were tabled, indicating that these profits will be subject to State and Federal income tax, but not to war times profits tax. It was reported that counsels' view had been confirmed by evidence given by the Federal Commissioner of Taxes before the Royal Commission on Taxation.

Conference between Graziers' Associations.

On the invitation of the council of the Graziers' Association of New South Wales, a conference between representatives of that association (Sydney), the Pastoralists' Union of S. Riverina (Melbourne), and the Pastoralists' Association of West Darling (Broken Hill), was held on 3rd inst., the associations being represented as follows:—

Riverina Representatives:—Messrs. A. S. Austin (president), J. H. Patterson, jun., L. S. Falkiner; secretary, Leslie Smith.

West Darling Representatives:—Messrs. John Dunne (president), F. F. Chomley, Ed. Andrews, James Parker.

N.S.W. Representatives:—Messrs. John Mackay (president), G. T. Esplin, N. W. Kater, W. W. Killen, C. A. Sinclair, C. G. Waddell; secretary, J. W. Allen.

Queensland Visitors:—Messrs. R. H. Edkins (vice-president, U.G.A.), Fredk. Ranson (secretary).

The conference was convened for the purpose of discussing matters of mutual concern, and particularly with a view to closer co-ordination in the work of the three associations, which together cover the whole of the State of New South Wales.

During the existence of the associations for a period of thirty years, a united policy has been adopted until last shearing season, when the Southern Riverina and West Darling Associa-

tions entered into an agreement with the A.W.U., but the Graziers' Association of New South Wales did not on account of refusing to concede the 44-hour principle.

Many matters of mutual concern were freely discussed at the conference, and the best of good feeling prevailed. Representatives expressed their appreciation of the opportunity for learning the viewpoint of the representatives of sister associations, and it is confidently anticipated that in future the associations will be able to work in more complete harmony than ever before, and that the unfortunate lack of unity which operated last season will not recur.

Executive Meeting.

The fortnightly meeting of the executive committee of the Graziers' Association was held on 7th inst., all members being present, and Mr. B. B. Allen presiding.

It was decided to hold the fourth annual conference of the association from 24th to 26th May (inclusive), and the annual general meeting of members on the 27th May.

Publications Received.

From the Ontario Department of Agriculture: Better Bulls and other publications.

From the Graziers' Co-operative Shearing Company Limited, Sydney, we have received a handy pocket calendar, which, among other matters, includes a shearing reckoner.

We have received from the N.S.W. Department of Lands the forty-first annual report to 30th June, 1920, also the reports of the Director of Soldier Settlements and the Western Land Board.

From Mr. J. E. Lucas, Agricultural Engineer, Paris, we have received a bulky volume, entitled Rational Feeding and Breeding of cattle in France, showing the methods used in that country at the present time by their best breeders.

"The Round Table" for December contains interesting articles on the Anglo-Japanese Alliance, Egypt as a Nation, President Wilson, besides the usual contributions from the Dominions and India.

From the Blue Funnel Line of steamers we have received two beautiful calendars, one quite unique, being a 15-in. replica of their funnel, on which is a picture of one of their ships, and at bottom a tear-off calendar.

We have received from the P. and O. Branch Line, who run a very efficient passenger and cargo service from Australia to England, via the Cape, a handsome calendar, with a fine reproduction of a sea painting. Gilchrist, Watt and Sanderson Ltd., Sydney, John Sanderson and Co., Melbourne, Geo. Wills and Co. Limited, Adelaide and Fremantle, and Wills, Gilchrist and Sanderson Limited, Brisbane, are the Australian agents.

The "All-Red Directory," being a directory of British manufacturers and their Australian representatives who are members of the Australian Association of British Manufacturers, which body exists for the advancement of British trade. Copies of the directory can be obtained at the Melbourne and Sydney offices of the Association, Collins House, 360 Collins-street, in the former, and Commercial Bank Chambers, George and Margaret Streets, Sydney.

"The Farmers' Red Book," an excellent annual publication, produced by the "Mark Lane Express," London (2s. net, by post 2s. 4d.). It contains facts and figures relating to the farm, markets and pedigree live stock, and is a veritable mine of information on events of the past year. Some of the items are as follows:—Average prices of English wheat from 1800 to 1919, Breeder's Directory, Cattle, Horse and Sheep Sales in 1920, Farmers and Farming in 1920, Crops in England and Wales, Live and Dead Weight of Fat Cattle, numbers of Live Stock in England and Wales, Pedigree Stock Breeding in the Future, Show Fixtures in 1921, Wool Prospects and Changes, &c. It will thus be seen what a wide field is covered, and there is also a number of interesting illustrations of notable stock. Copies can be obtained from the "Mark Lane Express," 3 Southampton-street, Strand, W.C. 2.

The Live Stock Journal Annual for 1921, just published, is a handsome volume, extending to over 350 pages, with some 225 photographic illustrations of winning live stock. The special articles, numbering over sixty, reflect in a wonderfully graphic fashion the record of a remarkable year in the history of British breeds, and make a direct appeal to all concerned in pedigree live stock. Following these articles come the usual breed reviews, and further notable features comprise the Breeders' Diary, incorporating Breeders' Tables for all classes of live stock, fairs and markets, live stock imports and exports, and a collection of statistics, tables and other information useful to stockowners. Enclosed in an artistic coloured cover, the popular edition is published at 3s. 6d. net, and the cloth edition, with red leather back, at 5s. net, by Vinton and Co. Limited, 8 Bream's Buildings, Chancery-lane, London, E.C. 4.

Blowfly Extermination.

Mr. W. A. Russell, of Dalmally, Roma, Q., where investigations into the blowfly pest are being carried out by a special committee of the Federal Institute of Science and Industry, writes:—"The fly trouble can be controlled and practically no sheep lost if owners will use dips. With a proper system the whole of the sheep could be dealt with in most places within a week. No virulent outbreak of fly has lasted more than six or seven weeks. This far we have got, and soon, I think, we shall have specifics to use with the jetting plants, which will give us immunity for long periods. Owing to the nature of the sheep's covering, and since we are still striving to put more wool on to it, we can hardly expect to get anything that will be effective against the fly from shearing to shearing. But it is reasonable to hope that there will be no occasion for a repetition more than about three times a year. But the plant must be ready for use, for the whole secret is to act, and act quickly."

The Sydney Motor Show.

The Sydney Annual Motor Show took place at the Royal Agricultural Society's Showground, Moore Park, last month, and attracted considerable public attention. There is always something new developing in connection with motor cars and lorries, and this was very evident in the magnificent collection of motor vehicles exhibited at the show. Improved parts and accessories, and artistic and ornate designs were apparent everywhere.

When one recalls the crude and far from successful motor car of a quarter of a century ago, and compares it with the triumphs of speed, utility, and comfort which are now placed on the market by the various manufacturers, one can be quite prepared for the wonderful improvements that are sure to be produced during the next quarter of a century. Each year's models appear to possess an advantage over the preceding year, and the alert motor car enthusiast is ever ready to buy something newer and more up to date, even though he may find it necessary to dispose of his old car to enable him to buy the later type.

The motor lorry section of the show revealed a phase of commercial activity which is expanding in a very marked degree. These lorries of various shapes and designs, and from a large variety of makers, appealed from a utilitarian standpoint to numbers of merchants, manufacturers, and primary producers, whose business demands the means of quick transport.

Every make of car and lorry was represented at the show. The stands of Dalgety and Co. Limited, the Standardised

Motor Company Limited, and Larke, Hoskins and Co. Limited were particularly noticeable, and are more fully described in the following:—

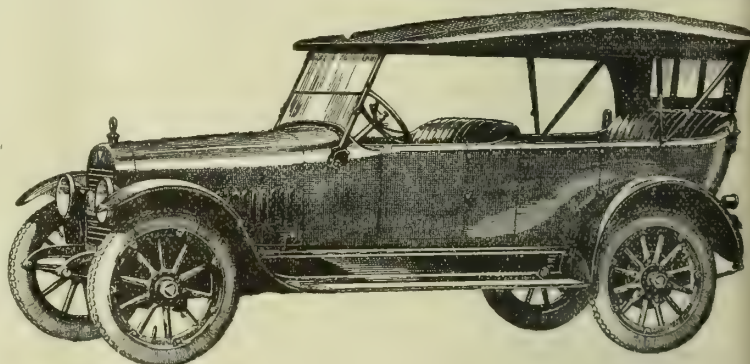
DALGETY AND CO. LIMITED.

Quality is always the keynote of items exhibited on the stand of Dalgety and Co. Limited in these motor exhibitions, and not only was this year no exception to this rule, but it eclipsed all previous records, in that the firm has just been appointed to represent **Rolls-Royce Limited**, and had displayed a magnificent chassis of this world's champion British car. There is no doubt that this chassis was one of the "star" attractions of the show, as it represented the post-war model of the manufacturers, of which such remarkable reports have been received here at various times concerning its improvements and superior quality.

The technical man found much of interest in the above, and also in a very fine 20 h.p. 6-cylinder **Wolseley** chassis, which is the first of the post-war models of this h.p. to arrive in Australia. Also an Essex chassis was displayed, which showed the sturdiness of construction that is not so easily apparent with the finished car.

Concerning the Wolseley, it is interesting to note that Vickers Limited are proprietors of the Wolseley Motor Company, who are famous the world over as steel merchants and engineers, and more especially famous in Australia as the makers of the Vickers-Vimy aeroplane in which Sir Ross Smith made his historic flight.

The most imposing complete car on Dalgety's stand was a 7-passenger **Hudson Super-six**. This car revealed quality from every aspect, both in the chassis and in the coach work. Another

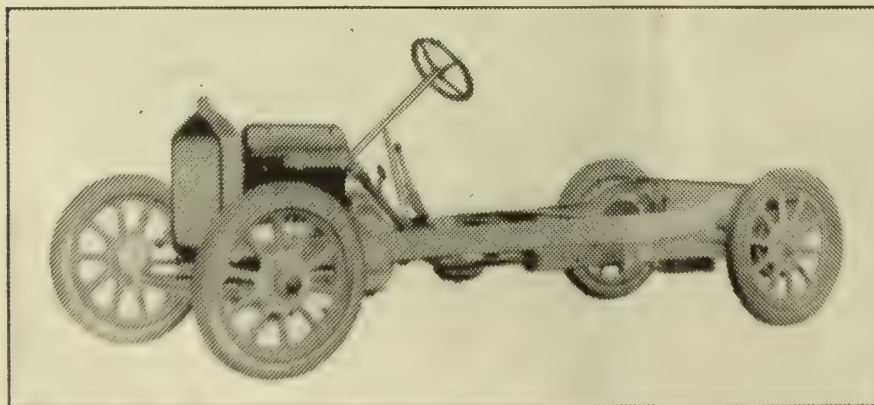


HUDSON SUPER SIX.

twelve months' experience with the Hudson Super-six has further proved that this car requires little or no alteration to enable it to retain its leading position in the motor world. The patented Hudson compensated crankshaft makes the engine one of the most vibrationless ever built, and this feature also enables the 29 h.p. motor to actually develop 76 brake h.p., which accounts for the touring superiority of the Super-six on hilly roads. The body on this car calls for special admiration. It was easily one of the best examples in the show, all the fittings being above the usual standard, and a very interesting feature was a pair of sliding doors, similar in action to a roller top desk, which shut off the folding seats when not in use.

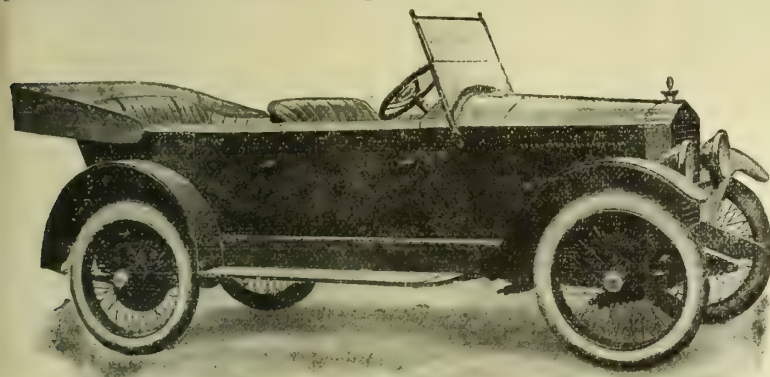
A Hudson compensated crankshaft was exhibited on the stand, and compelled a considerable amount of attention owing to the unique design and unusual proportions.

The Essex car, which is virtually manufactured by the Hudson Company, and also embodies the patented crankshaft, was represented by two complete cars, in addition to the chassis already mentioned. One was a de luxe 5-seater, painted a very uncommon shade of green, and the other was a new type of "special" roadster, recently designed by Dalgety and Co. Limited, and introduced for the first time in this motor show. It is one of the smartest looking single seaters that has ever been seen in Sydney, the outstanding features being the well proportioned "beetle-back," the domed mudguards, and special steps. The Essex is well



WOLSELEY 15-H P. CHANNING.

known as having been remarkably successful in hill climbing competitions in Australia, and in creating various world's records in



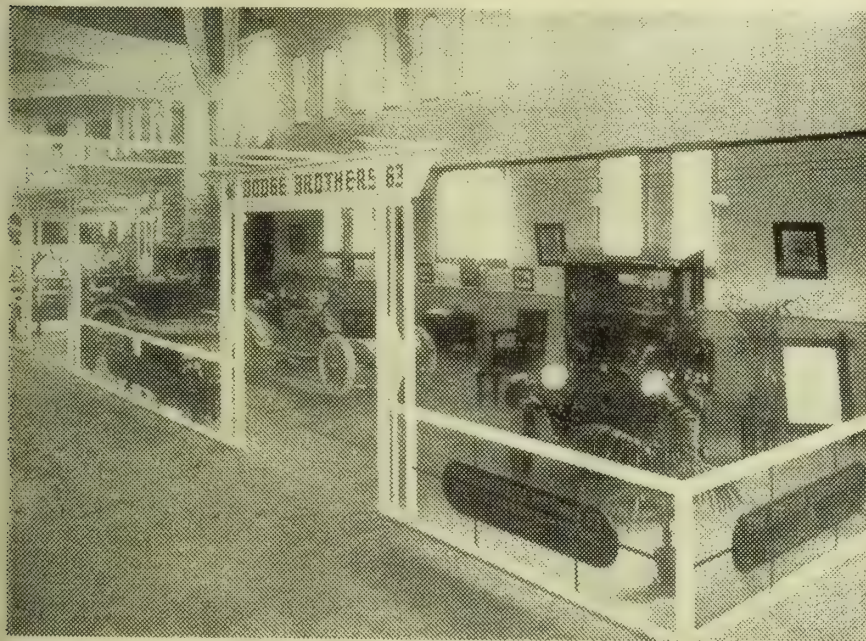
ESSEX TOURING CAR.

other parts of the globe. It has become known in this country as "the car that is light on tyres."

Dalgety and Co. Limited are to be congratulated on the artistic arrangement of their stand, as well as for the exhibits shown thereon.

STANDARDISED MOTORS LIMITED.
(Dodge Brothers' Motor Vehicles.)

Of particular interest to pastoralists and primary producers was the exhibit of Dodge Brothers' cars, staged by the Standardised Motors Limited. A stripped chassis was the centre of attraction,



STANDARDISED MOTORS LTD. (DODGE BROS.) STAND.

the simplicity of design being a feature that was particularly commented upon. The chassis, while light in appearance, is, nevertheless, of sturdy construction, accounting for its popularity amongst buyers who put their machines to strenuous uses. Being a standardised production, replacement parts are always available at reasonable prices, whilst the car, when sold as secondhand, commands a price relatively high as compared with makes the designs of which are continually changing.

Dodge Brothers first began manufacturing the car that bears their name about six years ago, and in 67 months they had completed and delivered to buyers 500,000 cars, and still the demand

continues just as strong and just as vigorous as in the first year of its existence. Dodge Brothers' business has been built up on sound commercial lines. The car itself is right, whilst the price, which is fixed in all parts of the world by Dodge Brothers themselves, is regulated to give the maximum of value to the buyer.

A very fine example of Australian body work was found in the touring car displayed on the stand, whilst a four-door Sedan (closed car) was exhibited to demonstrate the variety of uses to which Dodge Brothers' chassis adapts itself. Other purposes to which it can be turned were illustrated in a series of framed photographs showing Roadster body, and light delivery vehicles, which latter must inevitably find a wide sale amongst primary producers, who are rapidly recognising the value of quick transport as against the slower horse-drawn vehicles.

A glance at the registrations for the past twelve months would indicate that over 700 Dodge Brothers' cars were purchased by buyers in the State of New South Wales, which is but a reflection of the suitability of the car for Australian conditions.

In conjunction with the exhibit a film display was arranged, over 9000 feet being screened. These films illustrated the factory and the working of the North-east lighting and starting device fitted to Dodge Brothers' cars, whilst a thrilling exhibition of a Dodge car operating in the Death Valley, California, served to display the wonderful strength and reliability of the car.

LARKE, HOSKINS AND CO. LIMITED.

Ever since the announcement that two Austin landaulets, four Austin coupes and eight touring cars had been selected for the use of H.R.H. the Prince of Wales and party during his Indian tour, the Austin has been known as the Prince's car. Unfortunately, His Royal Highness was not able

to carry out the engagement. The Duke of Connaught and party in India are now using the machines, and a facsimile of the Royal landaulet was on view at Stand No. 1 at the Sydney Motor Show by Larke, Hoskins and Co. Limited, the local agents for the Austin car. The beautiful finish and workmanship of this famous car have been specially commented upon. The deep upholstery and the refined appearance of all the fittings make an instantaneous appeal. A feature that appealed to country visitors was the high road clearance.

The exhibit of Larke, Hoskins and Co. Limited was a comprehensive one, for it included the famous sturdy Bean, a noted English car, an Austin tractor, a British machine that has won many prizes in different parts of the world, the United 6-ton tractor for hauling goods over any kinds of roads, Hallford trucks, turned out by an English firm that has specialised in municipal vehicles for many years, and the Republic truck. This is an American vehicle, favoured throughout Australia both in city and country districts for its reliability under all conditions. Several accessory lines were also displayed by Larke, Hoskins and Co. Limited.

THE GOODYEAR EXHIBIT.

The display of the Goodyear Tyre and Rubber Company made a strong point of a product which concerns tremendously country dwellers, and therefore the whole Australian nation. This is the truck-tyre.

Of course the exhibit was thoroughly representative. There were examples of covers and tubes, from the 30 x 3½ to the large cord pneumatic truck-tyre, that towered above its little brother. There was also a complete range of the ingenious and highly useful accessories, which do so much to preserve the life of the cover.

The story of tyre making was shown (not only told) by progress samples from the raw rubber and cotton to the finish article.

But apart from the conventional "Exhibition" features, the important lesson was conveyed by the gigantic truck-tyres. The question of transportation is of vital national moment. To the problem of cheapness, speed, efficiency, and the traversing of long, arid, waterless stretches, the motor-truck supplies the solution. But it is safe to say that it would not have come properly (if at all) into its own without the pneumatic truck-tyre. The Goodyear exhibit showed examples of both cord pneumatic and solid truck tyres.

It would be incorrect to say that the solid tyre has been dispossessed by the pneumatic. The former has its own province, and in that province it is thoroughly efficient. The fact to remember, however, is that the solid tyre is suited to firm tracks, such as abound (or should abound) in cities and the immediate neighbourhood of towns. On the other hand, the monster pneumatic will go anywhere. It will plough through mud or sand, up-hill or down-dale, with the deadly certainty of a tractor or a "Tank." The Goodyear Cord Pneumatic Truck-tyre carries, of course, the All-weather Tread. This accounts for its safety as well as for its wonderful forward traction.

It was gratifying to note the deep interest taken by motorists during the show in these monster tyres, and in the subject of goods—and passenger—transport by truck. The Goodyear officials were applied to incessantly for information, and the Goodyear stand was a small lecture hall, in which peripatetic instruction was handed out to the most willing and receptive of students, whose interest remained unabated.

The Latest Books.

Effective Farming, by H. O. Sampson (London: Macmillan and Co.; price 10s. net). This detailed treatise is a text book for American schools. The writer is an American expert in agricultural education, with an extensive experience. Practical exercises and questions are at the end of each chapter for pupils, and the book is well illustrated and supplied with useful statistics.

Islands Far Away, by Agnes Gardner King (London: Sifton, Praed and Co.; price, 18s. net). Miss Gardner King spent some months in the Fiji Islands shortly before the war, living much among the natives in their own homes, away from the white folk. She now presents us with her impressions in pen and pencil, and succeeds in portraying a vivid picture of the people who 60 years ago were cannibals, and who still retain many of the more estimable traits of their once high degree of "savage civilisation."

Hunting Memories of Many Lands, by Sir Thos. H. Grattan Esmonde, Bart. (Dublin: A. Thom and Co.; price, 10s. 6d. net.) Sir Thomas Esmonde, well known as a traveller and sportsman, includes in this small volume records of some of his experiences in Canada, Newfoundland, Australia, New Zealand, Roumania, and his native country. The wide range of the subjects treated embraces moose hunting, red deer, wolf hunting, fishing, Maori mythology, &c. Numerous photographs reproduced in the book add to its interest and value.

Bull-dog Drummond, by Cyril McNelle ("Sapper"). (London: Hodder & Stoughton; price, 8s. 6d. net.) Drummond, having acquired the spirit of adventure in the army, finds life very dull after the armistice, and one afternoon while at tea at the Carlton he meets a young lady who has answered his advertisement, in which the "Demobilised officer, finding peace incredibly tedious, would welcome diversion. Legitimate, if possible, but crime, if of a comparatively humorous description, no objection. Excitement essential. . . ." Well you must read the book to know that he gets all the excitement he desires—and more.

Birds of La Plata, by W. H. Hudson (London: J. M. Dent and Sons; price, 37s. 6d. net., two vols.). In this well-produced work there are studies of more than 200 species of the birds of La Plata, with 22 admirable coloured illustrations by Mr. H. Gronvold. Although the book does not cover the whole of the birds found in the Argentine, "P.R." readers interested in the South American Republic, who are also bird lovers, will find the work appeal very strongly to them. Mr. Hudson has a vivid descriptive style, which gives us most interesting pictures of the pastoral plains of the Republic half a century ago.

The Fourth Dimension, by Horace Annesley Vachell. (London: John Murray; price, 7s. 6d. net.) The fourth dimension is life outside the three walls of the stage. From very intimate knowledge of his subject, Mr. Vachell has written a masterly story of stageland, which is in vivid contrast to the home, from which Jess, the young actress, hails. The daughter of an Anglo-Indian, who lives in the country, she breaks away from her conventional surroundings, and enters stageland, for which, apparently, she has natural gifts. Her problems, and the perils which beset her in her profession, are handled in a way that readers will thoroughly enjoy.

Publishers' Department.

THE BANK OF N.S.W. has declared a dividend for the quarter ending 31st December at the rate of 10 per cent., payable on 25th February.

PITT, SON AND BADGERY LIMITED paid on 19th January an interim dividend at the rate of 10 per cent. per annum for the half-year ending 31st December.

THE NORTH BRITISH AUSTRALASIAN COMPANY LIMITED show a loss of £3224 on last year's operations. This company owns 37,263 acres of freehold, and 69,200 acres leasehold lands in Queensland.

Buyers of FENCING WIRE, DROPPERS, &c., would do well to write for quotations to the United Graziers' Distributing Company, Box 460 G.P.O., Sydney, proprietors of "RESISTOCK" fencing wire.

DALGETY AND CO. LIMITED will remove their head office to temporary premises at No. 16 Finsbury Circus, E.C. 2, this month, pending the occupation of their new building, which is situated near the Wool Exchange.

J. C. LUDOWICI AND SONS LIMITED, for the half-year ending 31st December, show a profit of £4905, as compared with £3614 for the same term in 1919. A dividend at the rate of 10 per cent. has been declared, and £940 carried forward.

Those of our readers who are thinking of furnishing or re-decorating their homes would do well to consult MAIR AND LYNE PROPRIETARY LTD., of 274 Little Collins-street, Melbourne. This firm has a high reputation for good work and reasonable charges. They will gladly give advice and estimates for any State.

THE NATIONAL PROVINCIAL AND UNION BANK OF ENGLAND LIMITED, with head office at 15 Bishopsgate, London, advertises in this issue. The bank acts as agents for the sale of frozen beef and mutton, and will purchase and ship pedigree live stock on commission.

We have received from MESSRS. JAMES ALSTON AND SONS, Queen's Bridge, Melbourne, a well got up book describing their patent steel windmills, galvanised stock troughs, pumps, valves and fittings. Anybody who has to face water supply problems should make a point of obtaining a copy of this handy book, which is supplied free.

THE N.Z. AND AUSTRALIAN LAND COMPANY report a loss of up to 350,000 sheep, and between 6000 and 7000 head of cattle on its various stations during the two years ending March 1920 through the drought. Since March floods have caused further heavy losses. The company, during good years, built up a large contingency fund. By drawing £320,000 from that source it was enabled to pay its dividends. The policy now is to rebuild the fund, and as there is already £328,000 at its credit, a solid base exists on which to resume the making of contributions.

Artesian Boring Notes.

NEW SOUTH WALES.

Bores under construction on 1st February, 1921:—

Government.—Burren No. 2, 846 ft. in shale.

Private.—Dunumbral, 2249 ft. in shale; Mogil, 2405 ft. in shale; Quabathoo No. 3, 2314 ft. in quartz, completed.

QUEENSLAND.

The Springfield bore, Blackall district, on property owned by Mr. J. H. Hart, is now down over 7000 ft., and still in good boring material. It is intended to continue until a good supply of water is obtained.

NORTHERN TERRITORY.

On the stretch of 180 miles of dry country crossing from Anthony's Lagoon to Newcastle Waters, Mr. Peacock, the contractor, has already put down five bores and earth tanks at intervals of 20 miles. Good water has been obtained at 200 ft. to 300 ft.

Books that Every Grazier Should Read.

The World's Meat Future, by A. W. Pearse.

Sheep, Farm and Station Management (25/-), by E. H. Pearse.

Either of these practical works can be ordered from the Melbourne or Sydney office of "The Pastoral Review."

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Editorial Notes.

This month there are several very important articles on matters of especial interest, notably "Government Spending" and the urgent necessity for a halt in their riotous orgy of extravagance, pointing out the imminent seriousness of the financial outlook, and what the scarcity in money is meaning to so many graziers and the country in general; an article on deductions under the War-time Profits Tax, illustrated with diagrams; Shorthorn Types (illustrated), continued from last month; Land and the Immigrant, being a discursive criticism of a number of proposals for improving land legislation, and inducing greater settlement; The Border Collie, his Breeding and Training; Making the Most of our Natural Pastures, by "Talgai"; Cure for Footrot, Bluestone v. Arsenic, giving a number of opinions of practical pastoralists who have had experience of the disease; and, finally, a

The Current Issue.

third instalment of the very interesting account of a Motor Trip through Central Australia. The illustrations this issue cover a wide field, including champion stock at recent New Zealand Shows, On the Wallaby to Micalago Hereford Stud (N.S.W.), wonderful aerial pictures of the docks of London, a Horseless Harvester at Work, South African shearing pictures, and a number of others. "Fife and Drum's" Sporting Notes deal with the end of the English XI.'s tour and with racing at Flemington and recent yearling sales, while "Gnome's" topic this month is the value of the motor lorry as a means of transportation of goods in country districts, both as a service in itself and as an adjunct to the railways. He stresses very strongly, however, the paramount importance of good roads. Our London copy, including the meat and live stock letters, is unfortunately not to hand owing to delayed oversea mail, accentuated by the floods on the trans-continental railway. The mails are still most erratic, there having been a gap of nearly three weeks since the arrival of the last one from England, while no less than four are due within the next three weeks. All other matters pertaining to grazing and farming interests in general are fully dealt with as usual, with complete tables of statistics showing exports, &c. Such information as is contained in these and in the "trade" letters from our special experts can be relied upon as absolutely authentic, and cannot be obtained from any other source with such minimum of trouble and maximum of accuracy.

The Minister for Lands has recently announced the intention of the Government to go on with this bill when the House meets again later in the year. He *Large Holdings Sub-* could not have made the statement at a *division Bill in* more inopportune time. Mr. Storey has *New South Wales.* gone to England presumably to make financial arrangements in regard to the renewal of loans shortly falling due, and the financial position, generally speaking, is most difficult, to put it very mildly. Wool is down, and likely to fall rather than rise, and is difficult to get rid of at the present lower level of values. The Government must surely realise that this bill must seriously affect the value of our principal security. If the bill becomes law the price of country lands must suffer a sharp decline, and the margin between advances and security values must suddenly shrink, if it does not in many cases disappear altogether. Mr. Theodore experienced the result of his repudiation of leases Act when he was in London on a similar mission, and Mr. Storey will probably realise the same thing. The wisest course for the Government to take at the present time is definitely to withdraw the bill, and apply their energies to the more economical working of their departments and preventing waste and extravagance. It is high time that politicians of all opinions should recognise the fact that the primary producers of the State have carried the burden of taxation too long, and that the limit has almost been reached. People are beginning to realise that the community cannot stand the expense of Federal Government and State Governments too on the present scale of expenditure, and something will have to be done. The present cost of Government is absolutely absurd, and when it is all done at the end of the financial year there is nothing to show for the expenditure. If things go on as they are for a few more

years, and the inflated war prices return to their normal level, which would appear inevitable, people will not be able to meet their taxation bills, and Governments will not have the wherewithal to carry on. The whole trouble seems to be that we are living in a fool's paradise. The position of the employer to-day is worse than it was twenty years ago, because his extra income is more than eaten up by extra cost of production and extra taxation, while the employee is also in a worse position because his extra wages are more than eaten up by the extra cost of living. How these matters will be adjusted no one can foresee, but one thing is clear. Conditions will probably be worse before they are better, and only the clearest judgment and greatest care and tact can succeed in steering the State and Commonwealth through the troubled waters ahead, and this can only be accomplished by men who will devote themselves, their time, and their labour for the benefit and well-being of the State regardless of their own advancement.

* * *

The New South Wales Government has at last, under pressure that could no longer be ignored, decided to place the control and management of the Murrumbidgee Irrigation Area on a business footing, a course that we have urged for years. It has been a most costly undertaking for the taxpayer, and a perfect godsend to those who so dearly love to exercise to the full their powers of official muddlement and maladministration. The idea which gave rise to the work in the first instance was sound enough, but from the jump the scheme has never had a chance of success, trammelled as it has been by the voluminous red tape of officialdom, and blighted by the maleficent influence of Government "enterprise." Governments cannot run business concerns, under which heading the Murrumbidgee area properly comes, and that the control should be taken out of the hands that have run the show for the past eleven years was clearly indicated in the report of the auditor specially appointed to investigate the accounts of the area. He said "the conclusion arrived at has been that it was futile even to make suggestions, let alone to arrest improper expenditure, irregular procedure, or the piling up of unwarranted debts." The net loss during the year ended 30th June last was £284,567. This, added to the accumulated loss on the revenue account of £753,796, brought the total working loss on the area to no less than £1,038,363! An expensive hobby for the taxpayer! The Minister for Agriculture, however, stated last month that the Cabinet had approved a scheme for reorganising the administration and finances. It is intended that the chairman of the commission shall be a business man instead of the Minister for Agriculture, as hitherto. A district executive board is to be appointed, and two shires will be created. It is proposed to write off £3,000,000 of capital, and also to increase the water charges to settlers. Quite possibly under this new scheme, if only the Government can refrain from poking its finger into the pie, the area will become self-supporting.

* * *

We have not infrequently stressed the point that the Queensland Government's scornful disregard of its contractual obligations was such as to stop the influx of developmental capital, and cause the withdrawal of a lot of money already invested in the country. It is interesting to note what Mr. R. H. Caird, managing director of the Australian, Mercantile, Land and Finance Company Limited, had to say on the point at the recent annual meeting of the company in London. One sentence stands out as indicating whither the Government's policy is leading the country:—"For many years I have been rather suspicious of the trend of politics in Queensland, and we have not invested there to any great extent." Mr. Caird also said:—"Mr. Theodore and his party should attribute their failure to borrow money in London to the true cause, which is that, by their acts and by their words, they have created an impression in London that they do not respect a contract if it suits them to break it, and their recent threats to capital and fulminations against what they term 'wealthy London companies' are not at all

calculated to remove this impression, indeed they accentuate it. All this is very much to be regretted, for I am perfectly certain that no one here wishes in any way to interfere with the policy of any party in Queensland so long as the terms of contracts are respected, but if Queensland desires to have the benefit of British capital it does not seem to be too severe a condition to impose that all contracts should be carried out in their integrity." No country can possibly hope to progress without private capital and private enterprise, despite the maniacal ravings to the contrary of a lot of tub-thumping theorists. Mr. Theodore and his party are now beginning to realise what they have let themselves in for. They have spent and borrowed to the utmost limit, they have scared away the investor by their confiscatory policy, and now they are in "Queer-street," with unemployment rife and increasing, and their misguided adherents insistently clamouring for relief. Such is the penalty of extravagance and "advanced" Government.

* * *

The position in which South Australia finds itself after an exceptionally good season and a bumper harvest must be a source of grim satisfaction to certain

Crippling a State. Labour agitators, mostly in the eastern States. The story of the clever, designing

monkey coaxing a cat to pick hot chestnuts out of the fire is recalled by incidents connected with the world-record strike at the Broken Hill mines. Some time ago the miners at Broken Hill were cajoled into becoming members of the Coal and Shale Union, which has its headquarters in Sydney, and when the time arrived to begin the Bolshevik policy of paralysing industry imported agitators fresh from America persuaded miners at Broken Hill to strike, and to strike hard and long! These miners had been working under an award altogether favourable to the request they made to the court. Their hours had been reduced under a guarantee that production would not fall off (a guarantee, by the way, which was not kept by 12½ per cent.), and their employers offered to go back to the same sympathetic court which had already ladled out its favours with a very long spoon; but the orders were to "strike," and the iron rule of the modern union had to be obeyed! For eighteen months the strike continued throughout a period when the world's metal markets were at their highest peak. Australia lost the opportunity of selling metal products overseas to the extent of £15,000,000! The men lost several millions in wages, whilst the shareholders (mostly small investors) had to forego the dividends upon which many of them depended for their livelihood. Owing to the geographical situation of Broken Hill, part of an extensive railway system in South Australia is devoted to the transportation of coal and merchandise towards that centre and metals in return, but with the "hold-up" these railways quickly became a non-paying proposition, and the State of South Australia, which spent money in building these lines upon which interest had to be paid, and had provided equipment and staff, was forced through these outside influences to face a loss at the rate of £10,000 per week. Thus it has come about that although Nature has greatly blessed that State with favourable seasons, so big a drain has been caused upon the railway system by the strike that the Government has been compelled to penalise all other users of all other portions of the State railway system to make good the deficiency caused by the unwarranted industrial upheaval! Freights have been increased, fares added to, and the cost of transportation has risen considerably because a union, controlled from Sydney, wanted to use the miners for the purpose of breaking down hours and increasing wages. No sooner was the strike brought to a close than the metal markets of the world collapsed, and a portion of the plant at the smelting works which dealt with the products of Broken Hill was burnt down, and the whole industry was again thrown out of gear. The incident is of great significance as showing how individual States and the Commonwealth, notwithstanding good seasons, may receive a deadly blow from imported and local agitators, who seem to be allowed to "hold up" any industry or any State just as they please. Our predecessors had a much better way of dealing with the bushrangers in the early days of Australia!

Recent incidents will tend to make producers and exporters more than ever anxious to see the last of Government control in connection with the frozen meat export trade. Little more than a month ago an official announcement was made by Mr. Massey, Prime Minister of New Zealand, to the effect that as a result of negotiations with the Imperial authorities it had been arranged to reduce the freight rate on free meat from New Zealand by 5 per cent. It was only a small concession but none the less welcome as a step in the right direction, and a move was immediately taken by Australian shippers to obtain a similar reduction. However, it appears that something went wrong, for subsequent advice from the Dominion intimates an increase in the rates, ranging from 6 to 10 per cent. As for Australia, the request for a lower freight has been met with a notification that the charge for lamb and mutton is being forthwith increased to the tune of $\frac{1}{4}$ d. and 1-16d. per lb. respectively. True, there is a fractional decrease in beef, but it is so small as to be hardly worth mentioning ($\frac{1}{16}$ d. per lb.). The rates appear in detail in the trade section of this issue. In view of the general freight position the action of the Shipping Committee in increasing charges against Australian and New Zealand shippers, and through them producers, seems incomprehensible. The feeling is naturally present that the powers that be are endeavouring to make as much as possible while they have a hold over the position. The Imperial control of refrigerated freight ends on 30th April, and after that date we can but hope for reasonable treatment from individual shipowners.

The United States of America are evidently all out to build up a good export trade in pedigree stock with South America, mainly Argentina, Brazil, Uruguay and Chile, and problems in connection therewith were recently thrashed over at a recent conference in Chicago, under the auspices of the Bureau of Animal Industry, of the United States Department of Agriculture. Twenty-nine breed associations were represented, and two gentlemen who spent three months in South America last year on a survey of the live stock situation for the Federal Bureau of Markets gave a detailed statement of their observations. Also the recently-appointed Agricultural Trade Commissioner to South America, with headquarters at Buenos Aires, described the scope of his prospective operations, and announced the policy that he intended to follow with a view to promoting trade in purebred stock between the United States and South America. He goes with the indorsement of all the breed associations, and has been furnished by them with an equipment of lantern slides and moving pictures showing the types of purebred draught horses, beef and dairy cattle, hogs and sheep, which breeders in U.S.A. are in a position to export. He stated that certain get-rich-quick dealers menaced the movement by their disposition to resort to questionable methods, and with a view to circumventing this element he suggested inspection by North American breed organisations to ensure the exportation of nothing but reliable stock. "If we expect to get South American trade," he said, "we must send good stock." A committee was appointed to take definite action, and this body decided to leave the matter of issuing export certificates guaranteeing merit to the several breed associations. All this indicates a keen progressive spirit, which we fear is lacking amongst stud breeders here. Perhaps, however, it is not the spirit that is wanting, but the organisation to give effect to it. We breed good stock, and overseas markets for pedigree animals are continually opening up. South America is one, and there is no reason why we should not share it, particularly in regard to sheep, of which we should get the major portion, with U.S.A. Australian Merino breeders should form a strong organisation, and by following on the lines laid down in U.S.A., and by sending a representative over to, say, Argentina, to get things going, we feel sure that the present budding trade could be greatly expanded. Other breed associations should get together and act in a similar way. It simply wants initiative, organisation, and "push."

In connection with the foregoing, it is interesting to note that the New South Wales Sheepbreeders' Association has lately received advices from firms who have exported stud sheep to Japan, South Africa, and the Argentine, as to the necessity of having not only each sheep individually pedigreed, but that the pedigree should be vouched for by some well-known body, such as the New South Wales Sheepbreeders' Association, which, however, is not in a position to vouch for these as it should be. This question was put before breeders in 1918-19 by Mr. James Kidd, when he was president of the association, but in spite of his strong advocacy, and the backing up of some of the growers, the matter lapsed. His idea, and of those who thought with him, was to establish a stud book register for all the leading Merino flocks in Australia, giving such particulars for publication as owners cared to submit, and as approved by a specially appointed committee, it being considered that Merino stud sheep men would thereby be placed in a better position to answer the inquiries of overseas buyers, while intending purchasers would be able to select animals of the strain of blood they desired with absolute assurance. This question has been seriously revived by the letters received, and the whole matter will be gone into at the annual meeting of the Sheepbreeders' Association in July next, but at the same time it is hoped that sheepbreeders generally will give the matter serious consideration, and that members of the New South Wales Sheepbreeders' Association will go to the meeting prepared to help the proposal or some scheme of a similar nature that would have the desired effect.

The New South Wales Government is still dilly-dallying over the question of assisting the western graziers to build the barrier fence that will stop the wild dog invasion which is rapidly ruining their country, as far as its suitability for sheep is concerned. Mr. W. H. Morrison, writing in "The Western Grazier," says:—"... to my mind there can be no greater security than that which a well appointed barrier fence would ensure together with judicious extension of railways into the interior. Either one or the two combined would induce settlement and a profitable occupation of the land, the only thing that will ever cope with the dingo or any other undesirable pest. I can quite remember when 80 miles of country between Nyngan and Cobar were practically unoccupied and the wild dogs were infesting that whole area in thousands—eventually the country was all taken up and settled upon, with the result that the dog disappeared to such an extent as to be practically harmless. The same thing would occur in this far west if sufficient inducement were offered for the right class of settlement, and such inducement would be largely influenced by the protection that a barrier fence would provide. Induce the right man to occupy the land, keep the foreign brute from intruding upon him, and he will quickly and efficiently deal with the local pest, and surely more than that cannot be expected of him. There can be no doubt as to the heavy cost of erecting and maintaining a barrier fence, but is not our beautiful healthy western country worth spending money on? I submit that it is and that every acre of it is rich, healthy and productive, and a valuable asset. Then why should our Government hesitate to give it the consideration so urgently demanded?" Yes, why should they? We have all heard the oft-repeated excuse of no money, but that excuse won't wash. The Government are able to find money to spoon feed the unemployed. Why not make them work for it? Put them on to the construction of this western fence, a work of national importance, which will secure to the State an invaluable asset that is in imminent danger of being lost. It will at once find work for a large number of unemployed, who at present are subsisting on the bounty of the people, and it will in the long run add far more to the coffers of the Government than will be paid out for its construction. It is a thoroughly sound investment.

When this Act was being considered by Parliament, we pointed out many objectionable features, and foresaw that if it were passed and administered by the *Profiteering Act of Minister* who introduced it considerable *New South Wales* trouble might ensue. The power to fix prices of any commodities, whether necessities of life or "luxuries," is one which requires the greatest wisdom in its exercise. In the case of the milk supply of Sydney the court fixed the retail price of milk to the consumer, the court also fixes the wages to be paid to the employees by the dairy farmers, the Railway Commissioners fix the freights to be charged for the carriage of the milk by rail, the court then fixes the price at which the dairy farmer must sell the milk to the distributors. The result of all this is that the producer finds that it will not pay him to supply milk at the fixed price, and rather than send it to the city at a loss, he sends it to the local butter factory and is paid for his cream, or gives it to his pigs. The further result is that the consumer has to submit to a very limited supply of an absolutely necessary commodity, notwithstanding the fact that there is no shortage in milk production, and practically a milk famine exists. If the authorities want to put their radical theories on the law of supply and demand to the test, let them try them on some line of goods that really does not much matter, like clothing, for to test it on a necessary food like milk is little short of criminal. Everyone who has had anything to do with rearing children knows that at this time of year in this climate gastric troubles are very prevalent, specially amongst children, and for all such troubles a milk diet is practically essential; therefore, the plentiful supply of milk should be one of the first concerns of any Government. It would be interesting to know what effect the present milk shortage has on the death rate among young children, if it were possible to find out. It is admitted in regard to labour strikes that no power can compel a man to work if he does not want to, and we do not think that any power can compel a man to sell his produce if he does not want to do so, so it seems to us that the commandeering threat is simply a big bluff that will not come off. As usual, it is the working people who suffer most from the folly and ignorance of those they have put in power, and it is to be hoped that their memories will be sufficiently retentive to teach those responsible for the present milk famine a salutary lesson when the next election takes place.

* * *

The prices of rural products continue to decline, yet the costs continue to advance. One of the main reasons for the latter is the ridiculous application of the high tariff to farmers' requirements. *Effects of High Tariff.* Machinery, fencing wire, &c., have risen in price to such an extent that with so many lines of farm produce back to pre-war values, and with the almost insuperable difficulties in the way of obtaining labour, many farms are being turned into grazing areas. We have spent large sums of money in putting soldiers on the land, but what earthly chance have those men got of making any sort of headway with the prices of farm machinery where they are? This is what a high protective tariff does. It also, by enabling the manufacturer to possess a virtual internal monopoly, puts him in the position to pay wages and grant conditions of labour with which the unfortunate farmer hasn't a hope of competing. One man said recently in Victoria: "For the first time in my history we have been unable to obtain female labour, even a washerwoman. It makes life in the country very hard for the women when they cannot procure help. I know the city woman has her trials, but the country woman, with the lack of city conveniences, finds the strain unbearable." This is another reason why so many farms are being converted into grazing areas. The whole business furnishes a good example of Government inconsistency. One minute it talks largely and virtuously about the beauty and urgency of closer settlement of the country, and the next takes a step which is guaranteed to stifle production, make farming a thoroughly unattractive proposition, and reduce settlement to a minimum.

The agitation gets stronger month by month for decentralisation. In the Mother State of New South Wales the condition of affairs is scandalous, every thing is dragged away from the natural ports of a district to congested Sydney, where so backward are the arrangements that much of the produce has to be transferred to lorries and carried through the narrow streets to Woolloomooloo or Circular Quay. With the magnificent deep water ports of Eden and Jervis Bay unused, the produce from the Monaro and Southern Riverina is railed at an enormous expense away to Sydney, and to reach that port has to cross mountain ranges. Another instance is Byron Bay in the north, whither the whole of the produce from the northern tablelands should be shipped instead of dragging it down past the great Newcastle port to Sydney. Queensland, with Gladstone and Bowen, and Victoria, with Portland, are other glaring instances of our foolish unbusinesslike methods. Everything has been done to boost Sydney, Melbourne, Brisbane, and Townsville to the detriment of our primary producers. Lines, with their terminals at the ports mentioned, should be run into the back country, and the main lines to Sydney relieved of all their illegitimate traffic. In this way, and in this way only, will people be induced to leave the capitals and live elsewhere, and our producers be relieved of freight charges, which are weighing them down. There is no other country in the world where this foolish policy of centralisation, in one or two big cities, has been carried out. Its abolition should be the main plank at every election. Forty-nine years ago the then Premier gave the following assurance to the residents in northern New South Wales:—"We have consulted the officers, who are the proper persons to advise us, and we learn from them that we may fairly expect to have the railway opened for the Clarence to the most convenient point in the tablelands and New England in two and a-half years." Yet no step has been taken.

* * *

"Black" disease has for many years caused considerable mortality among sheep in New South Wales, particularly in parts of the southern highlands, and the worst feature of the trouble has been the almost complete ignorance surrounding its cause, and the best preventive and remedial measures. Dr. Sydney Dodd, D.V.Sc., F.R.C.V.S., Lecturer in Veterinary Pathology and Bacteriology at Sydney University, who has for the past six years made the disease an object of close study, announced last month, however, that he had discovered the causal organism, and had concluded that it was transmitted by the liver fluke. That "black" disease is acute fluke disease of the liver, as some stockowners think, Dr. Dodd says is disproved by the fact that fluke occurs in many places where "black" disease is unknown. It is not suggested that every fluke is an actual carrier of infection, though it is a potential one, which is shown by the fact that a large percentage of sheep on infected country, dead from causes other than "black" disease, have fluke-infested livers. These facts point to the assumption that if owners will get rid of the liver fluke they need not trouble much about "black" disease. To achieve this end they only need to carry out the instructions given in the series of articles on dealing with fluky country which appeared in the July and August (1920) issues of *The Review*. The question of immunisation by inoculation, especially where the obvious measures of draining, &c., are impossible, will doubtless further occupy Dr. Dodd's attention. So far the field tests in this direction have been inconclusive, possibly because of the fact that the owner during the summer preceeding the vaccination had drained the swampy places, with the result that both the controls, on notoriously bad country, and the vaccinated sheep showed the same low rate of mortality. Altogether, however, Dr. Dodd has much to be proud of in the consummation of his six years' investigations into the trouble, and his discoveries mean a long step in the direction of total elimination of "black" disease from the list of bugbears the stockowner is called upon to suffer.

Review of Pastoral Situation.

New South Wales.

Sydney, 10th March, 1921.

Splendid rains have fallen and are still falling throughout the State, and pastoral conditions continue excellent over almost all of it. The Hunter district was getting dry, but at the beginning of the month it received a real good drenching, so is now all right.

If these rains are not followed by intense heat good feed should be available through the winter. To ensure this, however, further showers are wanted during the next few weeks.

Live Stock Returns.

The returns of live stock at 31st December, 1920, have been furnished by the Stock Department. On comparison with the returns published for 1919, there has been an estimated decrease of 60,760 horses, and a decrease of 3,563,633 sheep, with an increase of 2630 cattle. However, so lax are some of the districts in sending in their returns that these estimates may be materially altered yet. The totals given are as follow :—

	Horses.	Cattle.	Sheep.
Numbers actually returned ..	419,560	2,430,207	25,315,996
Estimated by the stock inspectors as not returned for 1920 ..	76,843	424,670	4,585,705
Total returned and estimated ..	496,403	2,854,877	29,901,701
Numbers returned for year 1919, as per annual report ..	577,183	2,852,047	33,465,534
Decrease for 1920 ..	80,780	—	3,563,833
Increase for 1920 ..	—	2,830	—

It will be seen that the department is sanguine of the numbers returned being substantially increased when the returns are all in.

The decrease in horses is attributed to very little breeding, on account of low prices and small demand, also to the mortality resulting from drought conditions. The slight increase in cattle may be ascribed to introduction following the breaking of the drought in June last, many owners stocking up with cattle in lieu of sheep.

The decrease in sheep is attributable almost wholly to the droughty conditions obtaining for the first half of the year, and to the wet season during the balance of the year, which has, of course, been very severe on breeding ewes, and heavy losses have resulted. The decrease, however, is only half the number estimated last year, due mainly to good lambing in many districts, and introduction.

In the Eastern Division there was a decrease of 48,178 in horses, 112,069 in cattle, and 1,602,027 in sheep. In the Central Division there was a decrease of 28,873 in horses, an increase of 88,692 in cattle, and a decrease of 1,349,691 in sheep.

In the Western Division there was a decrease in horses of 3729, an increase in cattle of 26,207, and a decrease in sheep of 612,115.

Proposed Land Bill.

The Premier, Mr. John Storey, who has gone to London to endeavour to raise the wind in the shape of a loan, will have a bombshell awaiting him, in the news that the Minister for Lands has stated that the Land Bill, providing for the compulsory acquisition of large estates, which was dropped last year, would be reintroduced next session. He also indicated that any amendments would be of a minor character.

In the bill introduced last session it was proposed to give the owners of the land bonds bearing $4\frac{1}{2}$ per cent. interest, redeemable in 38 years. More repudiation!

The Murrumbidgee Fiasco.

Ever since the above irrigation scheme was started this paper has shown that it must ever be a philanthropic institution, kept going by the taxpayers. When the noted false statements were published throughout the world to boost the area, The Review was the paper which exposed the swindle and which forced the authorities to call the pamphlets in, but the trouble had been done. From all parts farmers were induced to realise on their farms, and come out to this land of promise, and as is well known many of them got a certain amount of compensation for having

been brought out under false pretences. Others didn't, but they nearly all lost all they had. Recently it was shown how the area has gone from bad to worse, and the latest proposal is to write off £3,000,000 capital. Not that that will improve matters, the taxpayer has still to pay the interest on it, if the scheme does not. The Minister for Agriculture states that the Ministry has decided to reorganise the administration and finances of the area. In future the chairmanship is to be held by a business man instead of by a Minister, as at present. A local board is to be established, and two shires are to be created, £3,000,000 is to be written off, and an increase in the water charges to be made. Under this new arrangement the Cabinet thinks that the area can become solvent and perhaps profitable. Nothing like being sanguine.

The Wild Dog.

A deputation representing West Darling pastoralists recently told Mr. Kavanagh, Assistant Minister, who was visiting Broken Hill, that the depredations of wild dogs in the district were so bad that almost all the sheep had disappeared, and that it was necessary to remove to other parts those not killed by dogs.

They asked the Government to erect dog-proof fences to prevent the inroad of dingoes from the northern districts, and to erect a similar fence to prevent dogs from penetrating into South Australia. It was suggested that the fence along the Broken Hill-Condobolin railway, when erected, should be made dog-proof, and that this work be put in hand as a relief measure. It was also stated that the Silverton Tramway Company would not object to the Government making their fence along the Silverton railway dog-proof, as far as Cockburn.

Mr. Kavanagh replied that he would stress these points when reporting to the Cabinet on his visit to Broken Hill. He was sure the unemployed would sooner earn money than have relief handed out, as at present. He would place the proposed schemes on the list of necessary works which he intended recommending to Cabinet as relief works.

Government Blight.

At a recent meeting of the Dubbo P.P. Board, consideration was given to the case of the Wollombi Estate, which was resumed over 12 months ago for soldiers' settlement, and which is still in the possession of the Crown.

The complaint of the board has been that, while the late owner occupied the land it was kept clear of rabbits, but since its resumption the estate has become a breeding ground for the pest. Some time ago the board issued the usual rate notices, serving them on the Minister, who resented the board's action. Later, counsel's opinion was sought as to whether the board could compel the Minister to keep down the rabbit pest on the estate. This opinion was to the effect that the estate is wholly outside the jurisdiction of the board. The board considers that it is unfair on the part of the Crown to be neglectful in such a way as to jeopardise the interests of landholders adjoining Wollombi.

Grasshopper Plague.

The Hunter River district has been suffering from a plague of grasshoppers. "They have been so bad, that the live stock have been affected and lost condition." Some properties have been eaten out, we are told. They are bad in other parts, but the dry spell on the Hunter accentuated the trouble caused by the pest. The recent rain, it is hoped, made an end to the trouble.

Country Shows.

The show season is well on, and numerous important country shows have been held recently. Amongst these were Uralla, Tamworth, Hunter River, Yass, Tenterfield, Maitland, Camden, Bombala, Mudgee, Glen Innes, Coolah, Quirindi, Cooma, and Goulburn.

Gun Licenses.

Mr. J. W. Allen, secretary of the Graziers' Association, points out that one of the regulations which have been recently issued under the Gun Licenses Act provides that, although the license is taken out in the name of the proprietor or manager of any bank, financial institution, or business concern, the gun itself may be used, carried, or kept by any other employee for the purpose of protecting the property of such bank, institution, or concern, notwithstanding that the name of such other employee does not appear upon the license.

"My executive consider," Mr. Allen stated, "that pastoralists and farmers will be sufficiently covered by this regulation, and that a separate license will not need to be taken out in the name of each employee upon a station, who may have occasion to use a gun for the purpose of destroying proclaimed noxious birds and animals."

Victoria.

MELBOURNE, 10th March, 1921.

The dry summer conditions reported last month continued till near the end of February, when monsoonal disturbances brought storms and heavy falls of rain. The northern belt received most of the rain, where it was not too welcome, it being a little too early for northern pastures. However, the farmers appreciated it, as it gives them a chance to get an early start with their cultivations.

Parts of the Western District are getting dry, the mean fall for February being 95 points, as against an average for the month of 123 points. The Wimmera, Mallee, and Central districts also received below the average rainfall, while the northern areas received a surplus. Mr. Oman, the Minister for Agriculture, is of opinion that the harvest will prove to be lighter than estimated, especially in the north, where "take all" has done more damage than was anticipated.

Improving Pastures.

The return of prices for live stock and wool to normal levels and the continued abnormal cost of production will bring prominently before the grazier the problem of how to stimulate production, without unduly further increasing costs, on the area at his disposal. The Department of Agriculture has for years been experimenting with top dressings of superphosphates on natural pastures, and, it is claimed by its officers, with most satisfactory results. At the experimental plots at Hamilton a dressing of 2 cwt. of super in one year raised the proportion by weight of clovers from 4 per cent. to 19 per cent. of the whole. The bulk of grass was increased nearly four times. At Glenthompson sheep were grazed, and it was found that twice as many per acre could be carried where the land was manured. In addition, the sheep gained three times more weight during the period October-January than sheep on unmanured plots. Further official tests on grass plots at the Rutherglen experiment farm have shown that annual dressings of 1 cwt. of superphosphate per acre, continued for a period of seven years, had increased the proportion of clovers from 21 per cent. to as high as 74 per cent. of the total herbage. This year the gain in weight of 19 sheep pastured for 40 days on $3\frac{1}{4}$ acres of natural grass, manured with 1 cwt. of superphosphate, at Rutherglen was $2\frac{1}{2}$ times as great as that made by a similar number of sheep pastured on a like area which had not been top-dressed.

The Oat Crop.

This year has been a bumper one for oats. In one quarter it is estimated that the return of grain for the State will be from 12 to 15 million bushels, or about as much as the whole of Australia produces in a normal year. This abnormal yield has brought the price for oats down with a run. The farmer probably had to pay 6s. for the seed, which has produced a crop not worth more than 2s. 6d. per bushel at the present time. The cost of labour makes this price a non-paying proposition, and representations have been made to the Commonwealth Government for an advance to farmers to enable them to hold their oats until a better market prevails.

The Port of Portland.

Last week the Commonwealth Government liner "Australford" took on a full load of wheat at Portland for overseas. This harbour is the natural port for Western Victoria, including that great wheat-growing district, the Wimmera, and which has recently been given direct communication by the completion of the railway from Toolondo to Cavendish. The opening of this connecting line enables wheat to be railed direct, thus saving 87 miles railage as compared with the journey to Melbourne. A suitable jetty has been erected, and the future of Portland as a deep sea port lies with its people to see that suitable labour is always available for speedy despatch of loading.

St. John's Wort.

A deputation from the shires of Violet Town, Shepparton, and Rodney, and the Victorian Farmers' Union, recently interviewed the Minister of Lands and Agriculture, and asked for Government aid to eradicate St. John's Wort, which is

getting more and more out of hand. The fear is that a patch of weed covering some 50 acres of rough Crown land will extend to the Goulburn and damage the irrigation works there, and it was urged that unless there was joint action in all the affected districts, with financial backing from the State, the trouble would never be overcome.

The Minister said a bill to deal with noxious weeds would be introduced next session. The proposal was to divide the State into five districts, each controlled by a board with authority to deal with such pests, the Minister having power to act if any of the boards failed to do so. Provision would be made for the shires to contribute £12,000 per annum, and the Government any additional amount that might be required. It was estimated that a sum of £1,000,000 would have to be spent over a term of years to eradicate St. John's Wort, but the first step would be to confine it to the districts already affected.

Live Stock Market.

During the month four sales of sheep, lambs, and cattle have been held at Newmarket, with a total offering of 132,540 sheep, 63,770 lambs, 10,260 cattle, as against 128,970 sheep, 76,150 lambs, 10,050 cattle for the previous month.

The following are the prices at the sales held on the 2nd inst.:—Sheep: Prime crossbred wethers, 31s. to 35s.; prime crossbred ewes, 25s. to 28s.; best Merino wethers, 27s. to 29s.; best Merino ewes, 20s. to 25s. 7d. Lambs: Prime, 26s. to 30s. Cattle: Prime pens of bullocks, £20 10s. to £23; good pens of bullocks, £17 10s. to £20; prime pens of cows, £15 to £17.

Notes.

The annual convention of the Chamber of Agriculture will this year be held at Sale on 12th, 13th, and 14th of April. A special feature will be a number of interesting papers that are to be submitted for discussion. Mr. A. E. V. Richardson, the agricultural superintendent, will deal with "Improvement of Farm Crops by Selection"; Mr. P. Ryan, "Flax and its Cultivation"; Mr. J. J. Pascoe, "Immigration"; and Mr. C. J. Matthews, "Why the Agricultural Bureau System should be established in Victoria," &c.

At the February meeting of the Royal Agricultural Society, Colonel C. E. Merrett was re-elected president of the society. Messrs. H. Cliff, L. Dugdale, and A. C. Gibb were elected vice-presidents; Dr. B. M. Sutherland, surgeon; Dr. W. T. Kendall, veterinary surgeon; and Mr. Hector Kendall, honorary assistant veterinary surgeon. Captain A. E. T. Payne was appointed representative of the council on the council of the Chamber of Agriculture, with Mr. G. L. Wilson as his deputy.

Owing to the general large increase in handling costs, the Melbourne Woolbrokers' Association has found it necessary to increase the rate of commission on the sale of sheep skins, hides, tallow, and bark to 4 per cent. It is pointed out that this is the first alteration made for some 40 years, although labour costs have risen 145 per cent. during that period. The Victorian Producers' Co-operative Company Limited also has decided to raise its charges to the same percentage.

Queensland.

BRISBANE, 6th March, 1921.

SOUTHERN.

The month has been remarkable for the little rain that fell, as it is usually very wet; the monsoonal rains are expected, especially in the north-west. The promise of the typical wet season has not been borne out, and though there were several precipitations of a fairly general character the total rainfall was not high, and the falls were capricious. In Brisbane only an inch fell during the whole month, whereas the average is well over six inches. It was not the driest February on record, but it was near it. About the middle of the month thunderstorms affected the coast, Warrego, Maranoa and Darling Downs districts. A general rain followed, but the registrations were not over an inch, except in the far south-west, where some very heavy falls were recorded, including 575 points at Bulgroo, and 573 points at Thylungra. Charleville had 211 points, and Cunnamulla 382 points during the month. This rain led to local floods around Charleville and Quilpie, where railway communication was interrupted. Generally speaking, the Burnett and Wide Bay districts and some of the southern

coastal districts felt the dry spell, and grass became scarce. The maize crop also fell away, and very little maize will be reaped in some districts.

Later.—After the end of the month a storm disturbance passed over the western segment, affecting places as far north as Richmond, and south as far as the border. The records, of course, were variable, but in some cases in the Richmond district they were over two inches. Longreach district fared as well, but the rain was lighter in towards Barcardine. Very heavy falls were obtained around Charleville and the Warrego and Maranoa districts, some places having four inches. Down towards St. George the falls were lighter, an inch being about the average. Towards Roma the rain was light, but soaking.

[By wire, 8th March.—Further magnificent rains covering practically whole State; especially heavy south-west, where eight inches. Likewise Blackall district. There has been an outbreak of ticks in three centres on the Darling Downs, at Clifton, Jimbour, and near Pittsworth. Strict quarantine enforced.]

State Meat Agreement.

The Government and the meat companies have been negotiating regarding an agreement for meat for the State shops, but so far have not reached a conclusion. It is reported that the Government is seeking the same conditions as last contract. In the meantime, an interesting development has been the operations of a representative of the State Trading Commissioner in the saleyards at Enoggera on 2nd March, when he made large purchases of cattle, his operations covering heavy prime cattle down to light forward stock.

The action of the Government in going into the open market in competition with the private butchers and meat companies was consequently strongly commented on, and the Ministerial explanation subsequently given was rather weak. It was that 33 head had been bought by order of the Government, and that the stock would be slaughtered and sold through the Brisbane State shops. The operations had nothing to do with the meat works agreement, he said. He also ridiculed a suggestion that the cattle were bought to keep up the market for the sale of State cattle.

If, as was stated, the cattle were bought to supply the State shops, what have become of the cattle from the State stations. Have they been sold at a high price through New South Wales markets? It is said that the State some time ago sold 2000 head to a New South Wales buyer.

The Loan.

Details of the Queensland loan show that a sum of £2,100,000 was raised, and that the pastoralists and graziers were well represented with £300,000. They beat the merchants, traders and manufacturers combined, and provided an instance of turning the other cheek, having regard to the attitude of the Government towards the taxation of graziers.

Basic Wage.

The full bench of the State Arbitration Court has given an extended judgment regarding the basic wage, which was formerly based on £3 17s. per week in Queensland. The rate laid down was £4 5s. in the southern and central districts (£2 3s. for females), and 10s. per week more in the northern division. The minimum will only be applied on application by the unions—not automatically. The court added that the minimum wage would be applicable "in industries of average prosperity," reserving to the court the right to fix a lower minimum in industries which are unable to bear the minimum, and to fix a higher rate where the prosperity of the industry renders such higher wage possible. Subsequently the A.W.U. asked the United Graziers' Association that the basic rate should operate from 1st January for the shearing industry, the station hands, the wool scourers. The basic wage judgment fixes the date for alterations in the awards for 1st March.

The Land Court.

A suggestion has been thrown out that the work of the Land Court is so congested that another appointment will require to be made to undertake it. This is the result of the numerous reappraisements necessitated by the Repudiation

Act. At present there are three members, and before another can be appointed legislative sanction will be required. It is suggested that this will be secured next session.

Railway in the West.

The Public Works Commission—since defunct owing to retrenchment—has reported adversely on a proposal to build a railway from Roma to Springsure, basing its objection on the ground that it has already reported in favour of a line from Charleville to Blackall. The cost of 155 miles is put down at nearly a million pounds. The Commission dealt with the question of moving stock in drought time, and added:—

While the Commission was of opinion that a railway across the Carnarvon Range was not warranted at the present time, it gave a lot of consideration to the necessity for an extension of the branch line from Springsure southwards. The large numbers of stock fattened in this area, the advisableness of developing the coal areas on Consuelo Creek, the necessity for opening further areas of Crown land for settlement, and providing reasonable transport to market, and the possibilities of agricultural production on the beautiful undulating black soil downs could all be advanced as reasons for an extension of the line southwards from Springsure to the range at some future date. However, in view of the fact that there were many districts in Queensland languishing for want of railways, it thought a connection between Roma and Springsure quite unnecessary and unjustifiable at present.

Unemployment.

In some of the western districts a good deal of unemployment has been reported. The low price of by-products has made it impossible for stations to continue to employ men at the high rates laid down in the awards for stations. The men complain that they have not asked for these high wages; but on the other hand, it is perfectly true that some of the old pensioners on stations were not only willing to accept the award rates, but were quite ready to demand them when the award came in. The high rates have also attracted large numbers of men from the other States, so that the position is the more acute.

Peculiar Wheat Position.

For the first time the State has produced more wheat than she can consume, and more wheat than she can grind. If full time is worked in all the mills there would still be nearly a million bushels over. This will have to be sent to the other States for gristing, as the existing power will not provide enough flour for Queensland's requirements. The farmers are receiving 9s. per bushel, less certain charges.

Live Stock Markets.

Four sales were held at Enoggera during February, a total of 26,230 sheep, 2490 lambs, 4840 cattle, and 828 calves being offered.

The following are the latest quotations:—Threequarter-woolled Merino wethers, 14s. to 24s. 6d.; half-woolled Merino wethers, 9s. to 19s. 3d.; quarter-woolled Merino wethers, 8s. 9d. to 20s.; full-woolled crossbred wethers, 22s. to 26s. 6d.; threequarter-woolled crossbred wethers, 16s. to 19s. 9d.; half-woolled crossbred wethers, 11s. to 18s.; prime lambs, 19s. 6d. to 22s. 9d.; good lambs, 14s. 6d. to 18s. 6d.; light lambs, 8s. to 12s. 6d.; prime bullocks, £14 7s. 6d. to £15 12s. 6d.; good bullocks, £12 to £14; light bullocks, £10 to £11; prime cows, £7 15s. to £8 15s.; good cows, £6 to £7; light cows, £4 10s. to £5 10s.; calves, vealers and weaners, 4s. to 40s.

The selling agents of stock at the Enoggera saleyards have unanimously decided that on and after the 14th February, 1921, the selling rate of commission will be 3½ per cent. In making this alteration the selling agents have in view the popularising of the yards by inducing owners to support the Brisbane stock market to a much greater extent than hitherto, which will be an incentive to meat works to operate on a larger scale than at present.

To enable selling agents to sell at the altered rate of commission it will be necessary to abolish, as from the 14th February, 1921, the rebate of 1½ per cent. to direct consignors of stock to the value of £2000, but this rebate will be paid on all stock sold prior to this date, provided their consignments total £2000 within six months prior to 30th June, 1921.

Notes.

The South Coast Pests Destruction Board has fixed the following scale of payments:—Crows, 9d. to 1s.; sparrows, 1d. to 2d.; sparrows' eggs, ½d. to 1d.; starlings, 3d. to 6d.; scrub magpies, 3d. to 6d.; these increases to take effect after 1st March.

Several parcels of wool exported during the month were consigned to Germany. Hides have also been bought with a German

option. One lot of 2000 meat works hides was sent away consigned to Genoa-Hamburg.

A meeting of farmers has decided on the necessity for the formation of a maize pool. Maize is selling at about 4s. 2d. per bushel, but it is held that it will not pay under 5s. The exact production this season is not yet known. The Government does not appear to welcome the pool. Plans are being prepared for a drying and cleaning plant, proposed to be erected by the Government.

CENTRAL.

The month was fairly dry in the central district. Except for light falls in the middle of the month very little rain was recorded in many parts. Blackall was an exception, with 259 points, and Tambo, likewise, with 231 points. The coastal belt had some rain, but most of the remainder of the division missed the falls in the north and south-west of the State.

Tick Pest.

A dip is to be erected at Muttaborra to facilitate the movement of stock from the Hughenden district and north Queensland generally to the central and southern districts. This is an alternative to the Lower Hill route, and is said to be better and more direct in some respects.

Interesting Well-boring Case.

At Blackall, the Water Supply Department is proceeding against George Hillier (selector), of Wandsworth, Lower Barcoo, near Jedburgh, and Cornelius Sheridan (a well-borer) on a charge of having deepened a sub-artesian bore without a license, and having struck a flow of water. The case presents remarkable circumstances, as the defendants state that the flow was struck at a very shallow depth, notwithstanding that no such flow has occurred in the immediate vicinity. The sub-artesian bore was being deepened for pumping purposes when the flow occurred. Owing to the illness of the departmental officer (Mr. Chapman) the case has been adjourned.

Deaths of Bulls.

Several valuable bulls, recently removed from Gracemere to Aramac, and intended for Tarbrax, died. It was at first thought to be due to red water, but later it transpired that they succumbed to the effect of the long journey in intense heat, having been trucked too soon after they were dipped.

Notes.

Major J. G. Pislo, Captain G. Koopman, and Dr. N. Nurmans, from Java, are now in the central district for the purpose of purchasing 400 horses for the army in Java.

The Commissioner of State Enterprises, having found that State fish shops do not pay, has initiated small goods establishments in conjunction with the sale of fish. Special arrangements are being made in coastal centres to obtain supplies of fish for the shops.

NORTH.

The northern division fared better than other parts of the State in the various rain periods. The Cloncurry district had good falls, Richmond registering 190 points in the first big rain cycle, and other far western stations for the month had 4 inches. Later in the month heavy rain fell in the sugar districts on the coast. In the closing days of the month still heavier rains were recorded on the northern coast, in the Carpentaria and the peninsula. Cairns registered for the month nearly 18 inches. Innisfail 20 inches, Ingham 13 inches, Proserpine 15½ inches, and Mackay 15½ inches. This rain should help to ensure a bumper cane harvest.

Efficacy of Dipping.

The manager of a northern pastoral holding has informed the Agricultural Department that as a result of regular dipping of his stock, 3000 head of cattle had been turned off the holding averaging 100 lbs. per head more weight than in previous years.

Cattle Position.

The Charters Towers Chamber of Commerce has passed a resolution protesting against the commandeering of beef at less than the market price. The Townsville Chamber subsequently passed a resolution objecting to the renewal of the agreement between the State Government and the several meat companies whereby the Government obtain 20,000 tons

of beef annually at a price below the fair market value. It is argued that the action of the Government is unfair to small cattle men in particular, and that graziers have enough to contend with without being singled out for an impost such as this. The resolutions have been placed before the Government.

Notes.

Answering a complaint made at Townsville that the Government had been sending commandeered cattle to southern markets, and selling them there at top prices, the Minister for State Enterprises said he did not believe the statement had been made, but if it had, it was both absurd and untrue. The Government had no commandeered cattle to sell, and any sales of State cattle were made under just the same circumstances as those of private pastoralists.

Reports from the Flinders state that a wonderful season has been experienced up there, the best for 20 years.

South Australia.

ADELAIDE, 9th March, 1921.

Following a long spell of exceptionally sultry weather a monsoonal visitation was responsible for heavy rains throughout the State during the last week in February. The outstanding feature of the weather for the month was the phenomenal downpour on the last day, the totals of which will be included in the March returns. These heavy rains, which were due to an inland monsoon, were very widespread, causing immense floods, which did a lot of damage to northern railway lines. Including the totals of the 1st March the aggregate for three days ranged from 3 in. to 6 in. at many stations, while several received 7 in. to 8 in., and over 11 in. fell at Wilmington, in the north of the State. This remarkable total is said to be unprecedented at any reporting station in South Australia.

The month provided very hot weather during the first half with exceptional heat towards the close. The floods have been responsible for considerable washaways, including one which held up the trans-Australian express for over a week. In many parts of the State considerable losses have been incurred by producers owing to cattle and sheep having been drowned, whilst in the more settled parts damage has been done to the fruit crops and the vineyards. Eliminating these distressing features, the rain will do an immense amount of good, giving the sub-soil a soaking which will prove of immense benefit later on. It can hardly be said, of course, that this unlooked-for visitation of a monsoon so far to the south represents a definite break in the season, so that it will be necessary for good rains to fall this month or April before any opinion can be expressed as to how the season will open. What we have had, however, will put the pastoral industry on a good basis for some time to come, while it will enable farmers to make good progress with their fallowing.

A large number of cattle intended for the Adelaide market during the current week are held up in the far north, with the result that supplies at the last market depended upon small local lots of more or less indifferent quality.

State Politics.

The Liberal Premier opened the campaign for the general elections for the House of Assembly, and half of the members of the Legislative Council last night, when he presented the Government policy. The keynote was economy, efficiency and stability, and an appeal generally for constitutional Government. The Premier made it very clear as to the difference between Liberal administration and Labour, and made an appeal to the people to stand for constitutional Government. After referring to the necessity of immigration, he stated that the policy of the Government was to give every encouragement for the development of rural industries, and he pointed with pride to the wonderful advance in land settlement under the administration of the Liberal Government. Over 2000 soldiers have been settled, and 700 are in the process of being trained for the land. It is expected that 5000

soldiers will ultimately be settled on the land in South Australia. The Government has advanced £20,000 to assist settlers in erecting vermin-proof fences. The Government propose to introduce a new system of land valuation, under which all land in the State will be valued by an independent authority in regard to (a) the unimproved value of the fee simple, (b) the improved value of the fee simple, and (c) the fair annual average value of the fee simple. These values would be accepted for State taxation purposes, water rates, &c. The Government policy was to continue the drainage system in the south-east. He claimed that the splendid financial position of the State was a result of the careful administration of Liberal Governments during the last four years.

The leader of the socialists will make his counter proposals to the Government in the course of a few days, but it is expected that the real intentions of the Labour party will be carefully disguised. In any case any Labour Government coming into office has no free will to exercise. Under the iron pledge which every Labour candidate is forced to give, orders issued from the Trades Hall must be obeyed, so that in the event of a Labour Government being returned South Australia may be expected to make history similar to that of Queensland and New South Wales. Election day is fixed for 9th April.

Murray Waters Agreement.

Considerable disappointment is felt in this State at the announcement that the agreement entered into by the three riparian States last year for the better control of the works in connection with the locking and the conservation of water on the Murray has been rendered null and void by amendments made in the Sydney Parliament. It is small wonder that Australian Parliamentary methods breed discontent, and cause people to have a contempt for the slow working of the Parliamentary machine. For over half a century the policy of locking and conserving the waters of the Murray has been advocated as a statesmanlike way of dealing with this waterway, which runs through three States, but the years have been allowed to slip by without any concerted action having been taken. It is now several years since the three States, supported by the Commonwealth, agreed upon joint action, but it was not until last year that this agreement came up for full Parliamentary sanction, and the passing of the various bills was accepted as the last stage in half a century of State jealousy and political controversy. To be informed now that the whole of the legislation is "null and void" is most disappointing in view of the fact that thousands of settlers have been induced to make their homes in the valley of this waterway on the assurance that every provision would be made to provide against drought years and low rivers.

Improving Dairy Bulls.

The criticism of His Excellency the Governor at the last September show concerning the number of three-cornered and other kind of bulls which had met his critical eye as he went about the country has caused consideration of a question which has often exercised the minds of stockowners without anything happening. However, at the last meeting of the Advisory Board of Agriculture, Mr. W. S. Kelly, the well-known breeder of Leicester sheep, submitted the following proposal for the improvement of dairy sires:—

Annual sales of dairy bulls to be held at such centres as the demands seem to justify; no bulls shall be offered at such sales that do not comply with the following conditions:—(a) Purebred and eligible to entry in herd book; (b) the progeny of officially tested stock, showing satisfactory performance records, the butter at standards for the various breeds to be decided by a committee of experts; (c) true to type and well grown; and (d) passed the tuberculin test. The Government to pay a bonus to purchasers of 25 per cent. of purchase money at end of the first year, and 12½ per cent. at end of the two following years. Applications for bonus to be made on forms issued at sale, and indorsed by auctioneer and Government representative. The bull to be available for service of at least 40 cows in the district at fee of 5s. head. The names of owners and dates of service to be supplied. The bull to be yarded, and kept in good condition. The board expressed its approval of the principle involved in the proposals, and deferred consideration until the next meeting.

Central Australia and the Trans-Continental Railway.

In view of the controversy over the route of the north-south transcontinental railway, South Australians are particularly pleased that a practical demonstration has again been supplied as to the capabilities of Central Australia. On a recent occasion a number of cattle bred in the Centre were travelled to the head of the line at Oodnadatta, and there trucked 1200 miles to Melbourne, where they topped the market against even the lucerne-fed cattle of Victoria. This is not the first time that this has been accomplished, both in Melbourne and the Adelaide markets, whilst horses from this country have been at various times in strong demand by buyers from India and Java.

Livestock Markets.

Cattle.—The yarding at this week's market comprised 1334 head, there being a good assortment of quality handy-weights, but a scarcity of prime sorts. The yarding was ample for requirements, but owing to Melbourne competition the rates were well maintained. The quotations are on the basis of 37s. to 39s. per hundred lbs., dressed weight.

Sheep.—The total for this week was 9925, which was less by 2000 than the previous market. Owing to the heavy rains graziers were looking for stock, and this caused spirited bidding and a firm market. The quotations are on the following basis:—Prime bullocks £13 10s. to £18, good £11 to £14 10s.; prime cows £8 10s. to £11, good £7 to £8 10s.; prime Merino wethers £1 14s. 6d. to £1 18s. 6d., good £1 11s. to £1 14s. 6d. Prime Merino ewes £1 11s. to £1 15s., good £1 7s. to £1 10s. 6d.; prime crossbred wethers £1 14s. 6d. to £1 18s., good £1 12s. to £1 15s. 6d.; prime crossbred ewes £1 12s. to £1 15s. 6d., good £1 6s. to £1 13s.; prime lambs £1 6s. to £1 9s., good £1 2s. 6d. to £1 5s. 6d.

General.

At the half-yearly meeting of the shareholders of Elder, Smith and Co., the acting chairman of directors (Mr. J. Fred Downer) announced a dividend for the past half-year at the rate of 10 per cent. per annum. He stated that business continued on a satisfactory basis, although general trade conditions were not too favourable, and caused anxiety. The fall in prices brought closer the day when post-war stability would be established, and then it was to be hoped that something like normal conditions would again prevail.

At the half-yearly meeting of Bennett and Fisher Limited, Mr. A. G. Rymill, chairman of directors, welcomed shareholders to the new offices of the company which have just been occupied. Shareholders, he said, would be glad to learn that the company was continuing to make very satisfactory progress, the profits for the half-year having exceeded the most sanguine expectations, and announced the payment of a dividend at the rate of 8 per cent. Mr. Rymill, in the course of a review of the money market, expressed the opinion that the financial outlook had much improved, and that exchange conditions with London were quickly altering for the better. He took a hopeful view of the future, and with the assistance of the public he did not think it would be long before normal conditions would again prevail.

Tasmania.

LAUNCESTON, 5th March, 1921.

The weather has been generally dry in Tasmania since the beginning of February, the rainfall, except in parts of the north, being much below normal for the month. In the Derwent Valley and on the east coast it was not much more than half of the average. At the end of the month there was a good fall, which helped to save the situation, and another small downpour early in March. These rains have had a good freshening effect, but the drying up of the pastures in the past month has been very pronounced. However, they were so good that there is still plenty of feed for this stage of the season. The outlook was shaping badly for a dry autumn, but recent downpours have brought a more hopeful change.

Harvest work has been late this year, and the cutting and stripping of the barley crop are being just finished off. Late crops, and especially white oats, have been poor, and in some cases a failure. Rust has been the principal cause. This trouble has been rather serious this season.

Splendid thrashing returns continue to be recorded. Oats have yielded to close on 100 bushels. Federation wheat has produced 70 bushels. Ruakura oats, which are coming into more favour in Tasmania, have given 70 bushels. The grain is good this season, and the standards fixed on 1st March are higher than they have been in any previous season. They are:—Oats.—White Giants: A, 43 lbs.; A, 42½ lbs.; B, 41 lbs. Stout whites: A, 41 lbs.; B, 39½ lbs. Algerians: A, same as last year; A, 36 lbs.; B, 34 lbs. Peas.—Blue: A, 66½ lbs.; B, 64½ lbs. Greys: A, 65 lbs.

Wheat Pool.

The wheat pool has created so much diversity of opinion that the Premier has addressed farmers in different centres to justify its establishment. The Government is being urged to guarantee a price for next season's wheat crop, but after consideration the Cabinet has not come to a decision, and as a result of the pool experience the Government may be disposed to permit the industry to follow the normal course.

Strike Effects.

Until the last two or three weeks the pinch of the shipping strike was not so severely felt in the Tasmanian produce trade as on some other occasions, but the settlement came just at the right time, as supplies were accumulating on the wharves. There is now more activity in the market, but prices are low, and farmers are dissatisfied. A deputation this week waited on the Minister of Agriculture and asked him to introduce legislation to fix a minimum price for produce that would leave a reasonable margin to the producer. The Minister replied that he regarded the scheme as impracticable, and urged the farmers to try co-operation instead.

Stock.

Stock are in good condition, but the dry weather has had its effect, and has resulted in larger supplies of fat stock being placed on the market, as in many cases owners have been disinclined to hold. Prices have therefore been easier at recent sales. An outlet is being sought in the Melbourne market, and two drafts of fat sheep have been shipped across by the V.D.L. Company. A large number of fat lambs have been purchased in this State for slaughter and freezing in Melbourne. Reports on the quality state that they have been classed as amongst the best shipped to England this season. The store stock market has held out fairly well, but has fluctuated in sympathy with the dry weather and then the recent rain. Competition is strong for all good woolled young sheep. Full-mouthed ewes and small or coarser types are not in demand, and prices have fallen. There is not much life in the store cattle market, the demand from the Straits Islands being yet small.

Wool Sales.

After all the delay the first Tasmanian wool sale has been fixed for 16th March at Hobart, and 18th March at Launceston. The offering will comprise 12,000 bales. The wool generally will be of good quality.

Rabbit Pest.

While the price of skins was so high the rabbit pest was got well under, but it is now increasing rapidly. A special committee which investigated the position in the north-west has urged the Government to consider the advisability of making a fixed price for rabbit skins up to 1s. 6d. per lb. to encourage rabbit destruction. The Chief Inspector of Rabbits, in his annual report, condemns the practice of trapping as a failure in keeping down the pest, and he urges a more uniform and systematic method of fighting it.

Butter Export.

An effort is being made to secure the continuance of the grading of Tasmanian butter in this State. At a conference this week the Minister of Agriculture said the dairy officers estimated that the loss in having Tasmanian butter graded in Victoria amounted to from £3 to £6 per ton, owing chiefly to the lack of facilities for carrying butter on interstate boats. He added that Tasmania occupied the premier position in Australia this season for butter quality. Tasmania's choice butter this season had risen from 36 per cent. to 59 per cent. The conference expressed a desire that the Commonwealth butter pool should be continued, and as an alternative that a State scheme for the marketing of butter be formulated.

New Zealand.

(FROM OUR OWN CORRESPONDENT.)

CHRISTCHURCH, 1st March, 1921.

AUCKLAND.

The weather in the Auckland province has been favourable to plant growth, and grass and root crops have done well during the month. The season has been a most favourable one from the dairy farmer's point of view, and the output of dairy produce will be a record. Graziers have had no difficulty in keeping the markets well supplied with fat stock, and the sudden drop in prices for both fats and stores will be a great disappointment.

The latest fat stock sale report to hand does not give the present day values, as since the date of the sale the markets have fallen. Prime bullocks were selling at £20 to £22, lighter £17 to £19 10s., prime cows and heifers £12 to £14 10s., lighter £10 to £11 10s., prime heavy crossbred wethers 31s. to 34s., medium 28s. to 30s. 6d., prime crossbred ewes 27s. to 30s., medium 23s. 6d. to 26s. 6d., prime lambs 28s. to 31s., and medium 25s. to 27s. 6d., forward wethers 20s. to 27s. 6d., rape lambs 17s. to 20s., small forward lambs 11s. to 15s.

The Cattle Tick.

For the eradication of the at present practically harmless cattle tick, fifteen dips have been erected in the north of Auckland by farmers' committees, and others are in course of construction, and forty more have been planned. They cost from £500 to £600 each, according to the locality, the Government giving a £150 subsidy. In districts further south there is considerable anxiety regarding the spread of the tick, lest some day it should become the carrier of disease. Several settlers were prosecuted recently for having exhibited at the recent Whangarei show (North Auckland) cattle infected with tick. The stock inspector stated that the cattle were infested with female ticks grown to a large size. Further, the ticks could be seen 10 yards off. It was ascertained that the defendants had been taking great interest in the efforts to have dips erected in the district, and that they really had not been careless over the matter. Each defendant was fined £1 and costs.

Rabbit Destruction.

It is reported that great execution has been carried out among the rabbits in the Hairini district, in the Waikato, by the newly appointed rabbit board. Proceeding on systematic lines, the board strikes a small rate over the whole area, and then engages a staff of men, who make a clean sweep by fumigation. A pack of dogs is employed to drive bunny to cover, and then all the burrows are fumigated with bisulphide of carbon, which has proved an excellent exterminator. While the summer lasts the work will be pursued rapidly on the swamp areas, and when the winter sets in the dry country will be given a further treatment. It is a further illustration of a well-known fact in New Zealand that the most effective enemy of the rabbit is the human being, provided he works in the right way.

TARANAKI.

A general rain has come when badly needed for crops and pastures. The shortness of feed had caused the supply of milk to decrease rapidly, but nevertheless the dairy season has been a very satisfactory one, and the output is expected to reach a million and a-quarter in value. There is still a keen demand for dairy farms, and there is evidently confidence in the future of the dairy produce markets.

HAWKES BAY.

The Hawkes Bay province is exceptionally dry, pastures being very bare, and the rape crops are generally poor. Store stock are very dull of sale, but there was beginning to be an improved demand for store sheep before the fall in the prices offered for freezing stock took place. Breeding ewes have been selling at 14s. 6d. to 26s., according to age; prime fat ewes, 20s. to 24s.; rape lambs, 14s. to 16s.; and cull lambs, 7s. 6d. to 9s. 6d. Good fat cows were selling up to £11 10s., but fat bullocks are seldom seen in the yards, usually going direct to the freezing works or local butchers.

WELLINGTON.

The weather recently has been very fine and dry, and feed is gone off considerably. The harvest is completed and the fields have been very satisfactory. A good supply of rye grass seed has also been saved. The various ram fairs held during the month have seen prices much below those of last year, as was to be expected under the conditions of the wool and meat markets. There is very little demand for store stock, except good breeding ewes, and under the uncertainty of the frozen meat market and the recent drop in the prices of mutton and lamb, farmers are very doubtful of the future. Caged ewes have come down to the boiling-down prices of some years ago.

Wheat and Oats—Estimated Yields.

The estimated average yields of wheat and oats for the 20-21 season are given by the Department of Agriculture as follows:—North Island, wheat 30 bushels per acre, oats 26.69; Nelson, wheat 24, oats 30.09; Marlborough, wheat 27.71, oats 44.38; Canterbury, wheat 28.63, oats 30.49; Otago, wheat 27.33, oats 37.32; Southland, wheat 36.35, oats 40. The estimated average for the Dominion is wheat 28.52 bushels per acre, and oats 33.86 bushels per acre. The actual average for last year was wheat 32.66 bushels, and oats 38.75 bushels. The total estimated yield of wheat is estimated at 5,975,000 bushels, as against an actual yield of 4,559,934 bushels last year. The crop this season is therefore expected to yield nearly as much as will be required. The potato crop is estimated at about 75 per cent. of last year's crop.

Shearers' Dispute.

A dispute has arisen between the Dominion Sheepowners' Federation and the shearers and shed hands concerning the wages to be paid to pastoral workers during the 1921 season. A conference between representatives of the parties has taken place, but no decision was arrived at. The president of the Shearers' Federation (Mr. H. D. Acland) pointed out that there had been a large depreciation in the wool market, and noted the following offer to shearers' representatives in reduction of the present rates:—Shearers, £1 per 100; pressers, 2s. 6d. weekly, or 1s. 3d. per hour; other shed hands, £2 per week, or 1s. 2d. per hour; cooks, £3 per week; cooks' assistants, £2 per week; other working conditions to remain unaltered. The wages offered will be plus the cost of living bonus, in each case to be decided by the Arbitration Court on the basis of the present bonus, which amounts to an extra 1s. per week, or 3½d. per hour.

The actual present award rates, excluding this bonus, were:—Shearers, 30s. per 100; pressers, £3 10s. per week, or 2s. per hour; other shed hands, £3 5s. per week, or 1s. 10d. per hour; youths, 10s. per week, or 1s. 6d. per hour. In all these cases the men were found. The rates for cooks are £4 per week, and cooks' assistants, £3 10s. The union delegates presented the following demands:—Shearers, £1 15s. per 100; pressers, £5 per week, or 2s. per hour; all other shed hands, £4 5s. per week, or 2s. 3d. per hour; youths, £3 per week, or 1s. 9d. per hour; cooks, £5 10s. per week; cooks' assistants, £5 per week. Mr. Acland stated that the sheepowners were prepared to take the whole matter to the Arbitration Court, and to abide by its decision. It was stated on behalf of the shearers that they would not go to the Arbitration Court, and there the matter stands at present.

Soldier Settlers' Rent and Wool.

The New Zealand Returned Soldiers' Association recently made representations to the Minister of Lands (the Hon. D. H. Guthrie), pointing out that as many returned soldier farmers had decided to hold their wool clips instead of selling at the ruling prices, the majority of them would not be able to meet their half-yearly loan instalments now due, and asking for an extension of the period for securing the ½ per cent. rebate (to those who can prove they are holding their wool) for three or six months. The Minister has now informed the secretary of the association that Commissioners of Crown Lands have been instructed that payment of instalments on loans may, upon application, be postponed for a period of six months from 1st January without interest being charged on the amounts so postponed. Upon rent and instalments being paid promptly on the forward date the usual rebate will be allowed.

Chaff Supplies.

It is reported that there will be an abundant supply of oat-chaff this season, and so far as the North Island is concerned, the output will be almost sufficient for local require-

ments. The North Island usually requires large consignments from the South Island, the supplies coming chiefly from Marlborough and Canterbury. In sympathy with the low price of oats, the value of oat-chaff has declined, and shipment from the South Island will be unprofitable business this year. Oat sheaves can, however, be kept in stack without much loss until the following season, and the probabilities are that a large quantity will neither be thrashed nor cut for chaff this year. Of course the demand for supplies will depend to some extent upon what the coming winter is like.

CANTERBURY AND MARLBOROUGH.

The weather has been more or less broken during the month, making harvest work difficult. The grain is now almost all in stack or threshed, and little damage appears to have been done. The wheat is turning out much better than was anticipated, and the official estimate should be reached, or even exceeded. The stock markets have received a knock out through the rise in frozen meat freights and the reduction of buyers' limits for fats by fully 1d. per lb. Store stock have also been seriously affected, and prices have fallen several shillings per head. Those who bought lambs for finishing off on rape will now find little or no profit in them.

The outlook at present is more serious than it was since the war started. The war naturally had its effect, but the war is now over, and improved conditions were hoped for, but the outlook for the immediate future appears to be far from bright. Soldier settlers will be hit very hard by the adverse turns of the wool and meat markets, but in Canterbury their rents had been well paid up to the end of December last.

A Lucerne Campaign.

Mr. A. Macpherson, who recently retired from the services of the Department of Agriculture, and who is one of the acknowledged lucerne specialists in the Dominion, in an address in connection with the Canterbury Provincial District Lucerne Committee, stated that a competition in lucerne growing is being organised. The conditions are as follows:—

(1) For the purpose of competition, the soil be classified as follows:—1. medium and heavy soils; 2. shingle and poor light soils; 3. loams with clay subsoil; 4. sand areas. (2) That the area for competition in all classes be ten acres, and must be declared and pegged off at time of entry. (3) That competitions start in spring, 1921, and awards be finally made in autumn, 1923. (4) That the sum of £315 be offered as prize money in each competition as follows:—First £100, second £80, third £60, fourth £40, fifth £20, sixth £15. (5) That irrigated lands and lands that have been dressed with farmyard manure, or artificial fertilisers, within six months of date of starting the competition or applied subsequently during date of competition, be excluded.

The Dominion Production.

The fact that New Zealand is not increasing its production, except perhaps in dairy produce, has several times been pointed out, and Mr. A. Macpherson, lately of the Department of Agriculture, has shown this clearly by figures relating to stock and agricultural products. His conclusions so far as Canterbury are as follows, and they indicate, among other things, his favouring lucerne in place of rape and turnips for stock feeding. He says:—

"It is quite evident that we must alter our present agricultural system, which, from the foregoing facts, is becoming obsolete. We must stop attempting to grow root crops, which are now unreliable on account of the prevalence of fungus diseases and the ravages of insect pests, and, under the present farming methods and conditions, are the most expensive crop a farmer can grow or occupy the land with. We must build up our humus depleted lands, particularly those used for grain-growing, by adding organic matter. We must cease to grow as pastures, particularly on our light lands, grasses and other plants quite unsuited to these, and we must feed all our semi-permanent and permanent pastures more rationally in the early stages of their growth if they are to have the carrying and lasting capacities so essential to increased production."

The Kea in Marlborough.

The dreaded kea is reported to have been advancing on Marlborough from the south in increasing numbers, and has

been invading the lower country. The Sheepowners' Union has been appealing to the Awatere County Council and the Wairau Road Board to take action against the enemy, and both bodies have decided to offer 5s. for every kea head, in addition to the Government subsidy of the same amount.

Live Stock Prices.

At the last Addington market prices for mutton, lamb, and beef were easier, and store lambs also declined in sympathy with fats. Prime bullocks made £19 to £24, medium £14 10s. to £18 15s., prime heifers £12 to £13 10s., medium £10 to £11 10s., prime cows £11 10s. to £13 10s., medium £8 5s. to £11, prime crossbred wethers 30s. to 33s. 4d., medium 26s. 6d. to 29s. 6d., prime ewes 26s. to 29s. 10d., medium 20s. to 25s. 6d., prime lambs 28s. to 32s. 3d., medium 25s. to 27s. 6d., two-tooth store ewes 20s. to 22s. 6d., four and six tooth ewes 20s. to 25s. 3d., six and eight tooth ewes 15s. to 19s., two tooth wethers 21s. to 23s. 7d., four and six tooth wethers 22s. 6d. to 23s. 7d., forward rape lambs 19s. to 23s. 9d., medium rape lambs 15s. to 18s. 9d. At the Kaikoura sheep fair, when 15,000 were penned, the results were the worst realised this season. A line of 250 fat wethers only realised 21s. (these of course having to undergo a long drive to the nearest freezing works), ewes made 2s. 3d. to 20s. 6d., lambs 2s. 4d. to 10s. 3d., and wethers 4s. 6d. to 19s. 3d. At the last Blenheim (Marlborough) sale store lambs made 2s. to 9s. 10d., forward lambs 16s. to 20s. 9d., four and six tooth wethers to 14s. 9d., and fat wethers to 16s. 9d.

OTAGO AND SOUTHLAND.

A good rain, with a lowering of the temperature, was experienced some ten days ago in most parts of Otago and Southland, and it was badly wanted, as the pastures were very dry and bare of feed. There has been a serious fall in all classes of stock, stores being only saleable at a considerable sacrifice, and in Southland fat sheep have also declined. At the last sale at Burnside, Dunedin, prices for prime sheep were firmer, but fat lambs and fat cattle both fell in price. Prime bullocks made £17 to £19 5s., medium £13 10s. to £15; prime cows and heifers, £14 to £16, and medium £11 10s. to £13 10s.; prime crossbred wethers, 34s. to 37s., medium 30s. to 33s.; prime ewes 28s. to 31s. 3d., medium 24s. to 27s. 6d.

Sheep Dipping.

In the South Island the Stock Act makes it compulsory to dip sheep during February, March, or April. In Southland more attention has been paid this season than previously to dipping after shearing, not only of dry sheep, but also of ewes and lambs; the latter, of course, with a non-poisonous dip. The most suitable period for dipping the various classes of sheep is still a much disputed point with many. With dry sheep, and at what stated intervals, it is less difficult for owners to settle, but for breeding ewes it is largely a matter of opinion, and various views are freely propounded.

High Prices for Draught Horses.

Some draught geldings and mares have lately been sold at very high prices in Otago and Canterbury. Three geldings were sold on behalf of Mr. Jas. Birtles, Waikouaiti (Otago) at £130, £85, and £75 respectively, and one for Mr. J. M. Smith, (Otago), at £100, all being purchased by the New Zealand Express Company. A six-horse team, owned by Mr. W. Jamieson, Dromore (Canterbury), changed hands at £119, £115, £100, £91, £90, and £86, or an average of a shade over £100. The first fifteen draught horses offered for the same vendor made an average of £75 per head. At a special sale of draught horses held at Dunedin at the time of the Otago A. and P. Society's Show two five-year-old geldings made £117 and £100, and others £35 upwards. Breeding good draught horses is now more profitable than it has been for some years past, as there is a scarcity in consequence of more team work now being done on the farm.

Western Australia.

[Owing to the floods on the trans-continental railway and the consequent holding up of the mails for over a week, our Western Australian letter has been delayed, and is not likely to arrive until after we have gone to press. We therefore wired our correspondent to telegraph us a summary of conditions to replace his letter.—Ed.]

PERTH, 11th March, 1921.

The worst summer for years is the general opinion of Westerners. January was bad enough, but February was worse. In the south west of the State for two or three weeks

the temperature ranged from 100 to 109. The fragments of north-west cyclone storms which usually visit the south have been absent.

Kimberley to Shark's Bay have been visited by cyclonic storms, accompanied by heavy rains in most pastoral areas, giving grass and plant life a good start. It is gratifying to receive some benefits from the heavens in compensation for falling wool values and the rapacious demands of the workers.

Woollen Mill at Albany.

There appears to be a good chance of establishing woollen mills at Albany, the splendid southern port. A Yorkshire firm sent out an expert to prospect and report, and the Government has given him every assistance. The expert considered Bunbury, Collie, Albany, and finally selected Albany. He considers that a mill manufacturing finest worsted is feasible as a commercial success, and it is now proposed to build the latest type of mill, with a capacity of 201,500 yds. of cloth annually. The estimated cost is a quarter of a million, including working capital, £30,000.

General Elections.

The general elections are to be held to-morrow. The public are apathetic, probably due to the fact that the Government is certain of return as strong as previously. There is no great rallying cry, voters being wooed on parochial questions. We lack a great leader. The Premier's initial address defended the Government's past, but said little inspiring regarding its future. Nevertheless it will get a solid majority, as people fear the Labour Party, while the Trades Hall is infested with Bolsheviks and traitors playing Germany's game by creating industrial strife in the Allied countries, while Germany works continually to regain economic supremacy. It is expected that the Country Party returns will number seventeen, so consequently they will be the dominating factor on the Government side. It is rumoured that Mr. Scaddan may succeed Mr. Mitchell as Premier.

Stock Market.

No cattle are coming from the north-west, as it is the off season, and the market is uninviting for distant cattle men. Supplies are coming from the Murchison, and they appear ample for local consumption.

Shearing Rates and Wages.

Trouble is threatened in connection with the shearing, which will begin shortly in West Kimberley. The Pastoralists' Association recently fixed the piece rates at 30s. a hundred for flock sheep, 60s. for stud rams, and 40s. for stud ewes, and wages of rouseabouts at 70s. and keep, pressers at £5, and cooks at £5 to £7 a week. The secretary of the Australian Workers' Union, however, says that no sheep will be shorn at these rates, the union's bedrock minimum being 33s. 4d. for flock sheep, 66s. 8d. for stud rams, and 43s. 4d. for stud ewes, while the wages demanded are 90s. for rouseabouts, £6 for pressers, and £5 10s. to £9 for cooks. Sheepowners must also, the union says, transport shearers to and from the nearest port or railway.

The Port of London.

Colossal Stocks.

Mr. J. H. Estill, commercial manager of the Port of London Authority, of whose New South Albert and Tilbury Docks we publish two excellent aerial photographs this issue, writes under date 23rd December, 1920:—

"You will be interested to know that we have the greatest stock of goods in store that we have ever had in the history of the Port, certainly in the history of the Port of London. The stock is 1,020,000 tons. Our normal stock before the war was about 500,000 tons, so that you will see we have made some strides in providing accommodation for the world's produce. No ordinary dock company could or would have done anything like this, and I again say that the Authority in taking such Imperial views have fully justified their existence, if for no other reason.

"Our stocks of wool are very heavy, but meat is very much easier."

South Africa.

BLOEMFONTEIN, 4th February, 1921.

Inland Wool Markets.

The question of the advisability or otherwise of establishing inland markets for the sale of wool has come to the fore of late, and has already taken tentative shape as far as one centre is concerned, namely, at Kimberley. An initiatory sale has already been held, but only appears to have been a qualified success. As the market for wool was then very much on the down grade, and there were no special attractions to offer to buyers from a distance, competition was very limited, and seemed to be confined more to local buyers, who were perhaps more interested in giving the venture encouragement than in operating on a purely business basis. At any rate the conditions were unfavourable for establishing any test as to whether such innovations are likely to prove successful or not. However, the intention is to renew the attempt as soon as the market becomes more settled. In the meantime the municipality of Bloemfontein has also seriously taken up the question of establishing a wool market. It has affirmed the principle, and is busy enlisting the sympathies and promises of support from the wool farmers of the district and surrounding areas. These proposals have aroused a good deal of alarm among the agents and brokers established at the coastal towns, which enjoy the monopoly of the wool-broking business. They are using all the arguments at their command to show the inadvisability of such a step, pointing out that all the buyers are concentrated at the coast, and that the shipping has to be done from there anyway.

Prickly Pear.

As in Australia, large areas in this country have come within the grip of the prickly pear fiend, and the problem of its extermination seems well nigh insoluble, unless some profitable economical use can be found for its leaves, fruit and stems. For some time past applications have been made on a fairly large scale of a solution—named after its inventor, "Rademeyer's Exterminator"—to the growth that is to be found in the more heavily infested districts. This solution is applied in the form of a spray, and there appears to be no doubt that if applied in sufficient quantity and strictly according to instructions, the destruction of the whole plant is effected, but whether this remedy is likely to be an economical proposition has so far not been satisfactorily proved. Opinion on the parts of public bodies and private persons who have given the exterminator a trial seems rather divided. Success has been attained in some instances; in others a different story has been told of only partial success, and at a cost of money and labour that raises doubts whether the adoption of the remedy will be worth the price of the land to be reclaimed.

At any rate the early trials were sufficiently successful to induce the Cape Provincial authorities to take over the manufacture and distribution of the remedy on the basis of disposal at cost price, which includes a royalty to the inventor, the services of the latter being retained for the supervision of its manufacture and application. The full justification of the confidence shown by the authorities in officially adopting the remedy has still to be demonstrated as far as the general body of afflicted land-owners is concerned.

Quarantine Regulations for Purebred Stock.

When the cattle breeders of the Union, who are interested in the importation of purebred stock from Great Britain, succeeded in their efforts for the abolition of the quarantine regulations which were imposed at this end as a safeguard against tuberculosis, and as a result, had all the vexations, delays, losses and expenses of the quarantining system transferred to the exporting end of the line, they did so without paying much regard to what the exporters had to say or suffer in the matter. A testing station was established at Pirbright by the British authorities at the request of this Government, and the result of course was to

raise a tremendous outcry among breeders of Great Britain who were concerned in the stud stock trade with the Union. They threatened to boycott the whole business, Breed Societies passed resolutions protesting against the new order of things, and pointed out that better markets were to be found elsewhere, minus all the vexatious restrictions and expenses. The Union Government refused to move in the matter of obtaining a modification of the restrictions, and in this attitude was supported by the Breed Societies established in this country. A continuance of the impasse would have boded no good to the interests of the cattle industry in this country, for it was becoming quite clear that the British breeders would have to be tempted with very high prices indeed if they were to be induced to ship cattle to the Union with all the responsibilities, risks and delays attendant on quarantining at Pirbright, and that it would only be an inferior class of animal for which high prices were paid that would be likely to be sent out.

However, the difficulty has been largely overcome by arrangements having been made by which approved private premises can be used for the application of the tuberculin test, which will avoid the necessity for all cattle intended for export to the Union being sent to a single testing station. The arrangement meets with approval of both sides, and imposes no special disability on the export of high-class stud stock to this country.

Anthrax.

Anthrax of late years has taken a strong hold upon the herds of South Africa, and is prevalent from one end of the country to the other. Every Gazette that appears contains a long list of "outbreaks." The disease can safely be said to be causing a much larger number of deaths than the dreaded East Coast fever, and is infinitely more dangerous, and yet the disquieting state of affairs is not arousing anything like the concern and attention that is being devoted to the latter infection. This is not for want of warning either on the part of the Government or the press, who have pointed out the serious economic consequences that are likely to ensue, not only as regards the loss of stock itself, but as a result of embargoes that are likely to be imposed by other countries unless effective measures are taken to check the spread of the disease.

The greatest enemies to the farmers' interest in this respect are the farmers themselves, many of whom will not take measures to prevent the spread of infection either on or from their farms. Another almost hopeless obstacle lies in the omnivorous native, who, as far as the flesh of animals is concerned, draws the line only at animals killed by lightning. Here his superstitious nature comes into play. For the rest, meat is meat, no matter what the causes that have converted a live animal into a carcase. Occasionally a native pays for his temerity with his life as the result of consuming an anthrax subject, but as a general rule he pins his faith on some concoction or other that the "inyangas" or medicine men of his race prescribe as preventives, and it is on this account that even when farmers do take precautions by burying stock that have died from anthrax that their precautions are nullified by natives, who think nothing of resurrecting the carcase, which in this manner may be distributed for miles around, and so the deadly disease is spread.

As a preventive, reliance has largely been placed on vaccination, but the only form of virus that has given any guarantee of immunity is that prepared by a well-known Australian institution. Our own veterinary Research Department has been busy of late working out a new vaccine called "spore-vaccine," and now announces that the product can be recommended with confidence, having been proved with excellent results in a large number and variety of animals. It is said to be quite harmless if applied according to instructions, and confers a much stronger degree of immunity than the old vaccines. Before being issued to the public, it will be tried on a large scale in one of the most grossly infected districts.

Among the Natives of the Loyalty Group, by E. Hadfield. (London: Macmillan and Co.; price, 12s. 6d. net.) The author, Mrs. Hadfield, acting under the instructions of the London Missionary Society, spent several years among the islanders of the Loyalty Group, which lie to the east of New Caledonia. The work gives an account of the people inhabiting the islands, and their habits, manners, customs, and legends. All those who are interested in folk-lore and travel should not fail to get this well-produced and splendidly illustrated volume.

Argentina.

(FROM OUR OWN CORRESPONDENT.)

BUENOS AIRES, 1st January, 1921.

Well, the year has ended with, in many ways, an anxious position. Although seasonal conditions are good, many important lines of produce are almost unsaleable. This applies more to produce from live stock, rather than grain, which still fetches excellent prices.

The estimate for wheat, which will be published next week, is expected to show a reduction of 3½ million quarters compared with last season. There is still on hand a stock of old wheat amounting to 750,000 quarters.

As regards oats, these will show an increase of possibly 4 per cent. over last year, with linseed also a larger crop. The yields are expected to be:—Wheat, 23,000,000, against 26,500,000 quarters; oats, 6,000,000, against 5,800,000 quarters; and linseed, 1,100,000 tons, against 1,069,000 tons. The maize crop is progressing excellently, and a large garnering is hopefully looked for.

Texas Fever.

Texas fever, or tick fever—"tristeza"—is being fought vigorously by the Argentine Bureau of Animal Industry, with most encouraging results. Every year large zones of territory are added to those which have already been freed from the disease, the means used to eradicate the tick being similar to those practised in the United States. The fever prevails in northern Entre Rios, northern Santa Fe, and in Corrientes, Chaco and Formosa. Cattle born in these provinces are immune against the disease.

As regards tuberculosis in cattle, it is hardly known in this country. A few cases have been discovered, but although there is a strict examination at the slaughter yards, thousands upon thousands of steers are passed as absolutely clear from that or any other disease.

Water Finding.

Mr. James Thomas, Major Plains, via Goorambat, Vic., called at our Melbourne office the other day and gave us an interesting demonstration of water finding. Mr. Thomas did not use the conventional twig, but had a whole battery of indicators, copper pipes, copper wire, silver wire, ordinary wire, glass tubes containing mercury, brass weights, and old watch mechanism. He located a run under the office, but pronounced it either a defunct stream or a mineral vein, making his deductions from the varying effects on the indicators. Holding the brass pound weight or the watches the action was so strong in the electrical effect produced on his wrists that the pain prevented him from proceeding. Had there been water he states that he would have been able to stand over the stream without suffering any inconvenience.

Mr. Thomas has been experimenting for over nine years, and has done much successful water locating in various parts of New South Wales and Victoria.

Rainfall Returns.

EXPLANATION.

In the first column will be found the average yearly (district) rainfall, in the second the total fall to date, in the third the mean fall for the month, the fourth is the average rainfall for the next month based on the return of rainfall ever since records were taken, and in the fifth the condition of the pastures—E, excellent; G, good; F, fair; I, indifferent; B, bad.

WESTERN AUSTRALIA.

No.	Division.	Average Yearly Rainfall.	Total from 1st Jan. to 28th Feb.	Total Fall for Feb.	Average Rain-fall, March.	Pastures.
		Inches.	Points.	Points.	Points.	
1	North Kimberley	27.04	1,622	1,429	434	F
2	East Kimberley	25.70	1,084	1,070	326	F
3	West Kimberley	23.26	847	775	364	F
4	De Grey	13.59	601	598	302	F
5	Forbesque	9.44	974	974	120	F
6	West Gascoyne	9.11	538	536	62	F
7	East Gascoyne	9.39	109	87	91	F
8	S.W. North Coastal	17.85	104	94	56	F
9	S.W. South Coastal	36.26	135	149	97	F
10	S.W. Central	17.66	133	98	81	F
11	Eucla	14.35	43	12	101	F
12	South-eastern	9.95	47	17	95	F
13	North-eastern	10.23	14	11	99	F

SOUTH AUSTRALIA AND NORTHERN TERRITORY.

No.	Division.	Average Yearly Rainfall.	Total from 1st Jan. to 28th Feb.	Total Fall for Feb.	Average Rain-fall, March.	Pastures.
		Inches.	Points.	Points.	Points.	
14	Northern Rivers	44.70	2,153	1,151	775	F
15	Northern Plateau	12.18	907	536	149	F
16	North-west	8.21	578	433	52	G
17	Far North	7.02	181	168	67	G
18	West of Spencer's Gulf	13.02	336	226	69	G
19	Upper North	13.03	541	338	68	E
20	North-east	8.30	478	391	55	E
21	Lower North	17.39	416	237	84	E
22	West-central	17.15	239	96	84	E
23	East-central	23.61	284	98	115	G
24	Murray Valley	13.01	321	170	86	G
25	Upper South-east	16.57	266	143	93	G
26	Lower South-east	25.49	183	72	120	G

QUEENSLAND.

37	Peninsula North	57.76	3,004	874	1,166	E
38	Peninsula South	39.67	2,060	548	753	E
39	Lower Carpentaria	28.20	916	399	414	E
30	Upper Carpentaria	26.02	766	370	362	E
41	Barron	63.85	2,792	957	1,222	E
42	Herbert	76.84	2,092	960	1,400	E
53	East-central Coast	46.96	1,208	427	651	G
64	West-central Coast	24.17	1,234	268	350	G
47	Central Highlands	25.16	703	119	298	G
48	Central Lowlands	19.59	334	106	253	G
49	Upper Western	15.20	510	333	205	G
40	Lower Western	11.98	339	194	198	G
21	Port Curtis	37.18	824	161	463	G
32	Moreton	49.49	788	169	688	F
33	East Darling Downs	28.30	289	135	303	F
33	West Darling Downs	23.84	267	86	278	F
33	Maranoa	23.67	162	52	283	G
54	Warrego	17.76	310	147	223	G
22	South Far-west	13.08	227	138	138	G

NEW SOUTH WALES.

46	Trans-Darling North	9.11	160	149	86	G
47	Trans-Darling South	9.90	334	294	66	G
48	Cis-Darling North	13.71	294	142	123	G
49	Cis-Darling South	12.44	219	179	100	G
50	Upper Bogan	17.55	232	74	150	G
51	Lower Macquarie	17.83	302	113	159	G
52	Western Gwydir	20.02	168	80	210	G
53	Eastern Gwydir	23.45	145	99	259	G
54	Nandewar	28.40	272	130	290	G
55	Liverpool Plains	26.95	178	88	242	G
56	West New England	31.27	404	259	294	G
57	East New England	36.72	691	235	534	G
58	Clarence	53.62	1,195	277	732	G
59	Orara	54.30	2,436	384	731	G
60	Manning	49.38	1,446	215	570	G
61	Hunter	35.01	516	120	362	G
62	Cudgegong	25.53	279	103	216	G
63	Central Plateau	34.67	578	135	330	G
64	Warrumbungles Highlands	27.26	327	114	230	G
65	Lowlands	21.92	250	86	179	G
66	Sydney	48.19	408	93	511	G
67	Nepean	31.75	533	33	350	G
68	Illawarra	39.92	582	214	444	G
69	South Coast	35.97	758	552	405	G
70	Upper Murrumbidgee	25.18	576	266	229	G
71	Snowy Mountains	40.70	516	313	317	G
72	Jugiong	30.26	353	188	231	G
73	Tumut	21.57	238	104	175	G
74	East Riverina	16.46	327	189	150	G
75	West Riverina	13.71	179	103	110	G

VICTORIA.

76	Mallee North	12.57	392	195	86	G
77	Mallee South	13.73	262	88	32	G
78	North Wimmera	16.26	213	51	103	G
79	South Wimmera	19.58	296	108	110	G
80	Lower North Country	16.93	309	158	118	G
81	Upper North Country	19.64	345	158	133	G
82	Lower North-east	28.48	481	269	220	G
83	Upper North-east	42.50	496	193	277	G
84	East Gippsland	30.29	480	308	255	G
85	West Gippsland	35.12	349	140	284	G
86	East-central	33.69	464	121	270	G
87	West-central	24.08	432	144	213	G
88	North central	26.11	427	165	181	G
89	Volcanic Plains	23.88	360	118	173	G
90	Western Coast	29.86	223	90	195	G

TASMANIA.

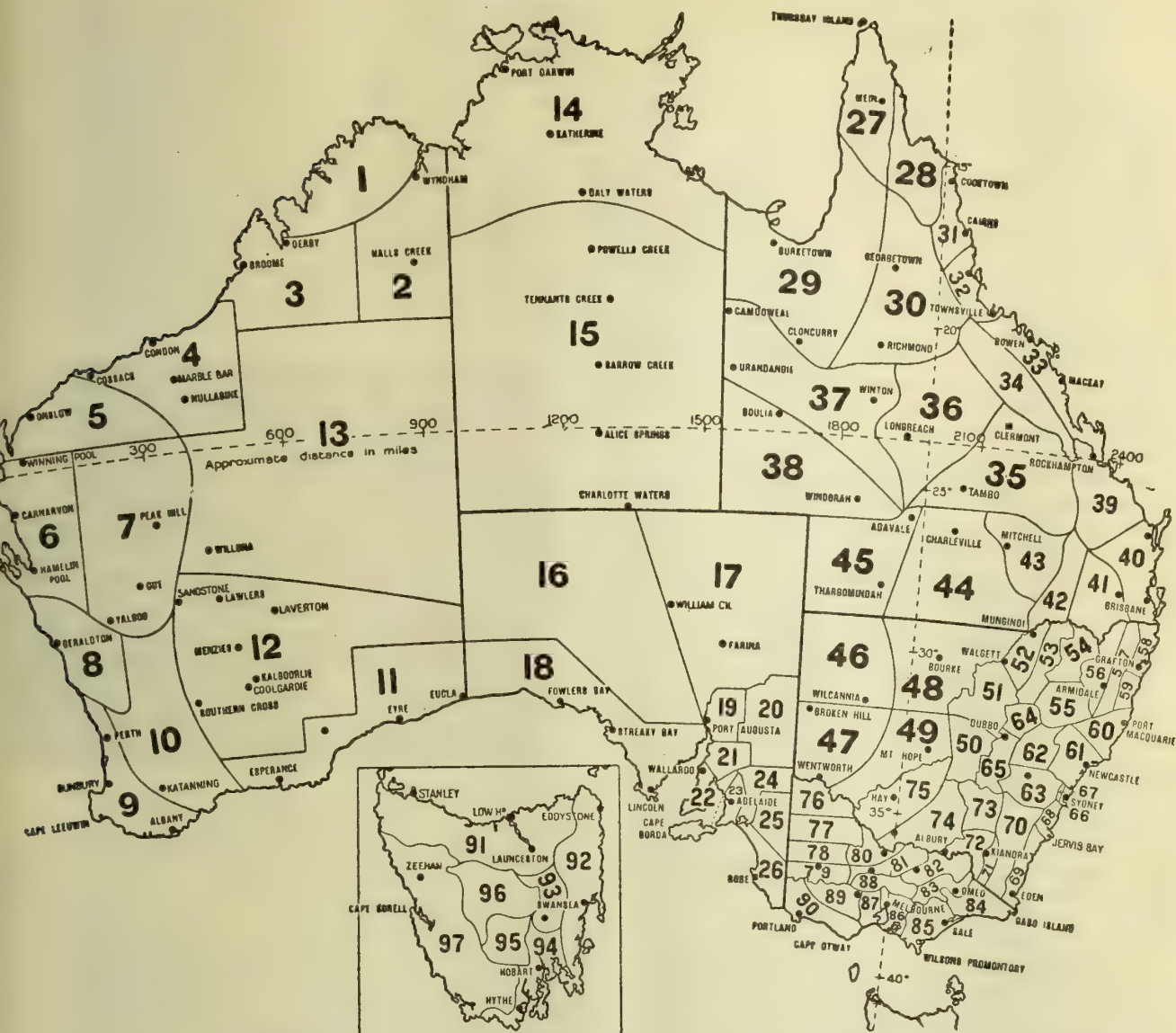
91	Northern	41.15	375	167	241	G
92	East Coast	32.26	306	85	313	F
93	Midland	21.63	321	90	173	F
94	South-eastern	27.98	355	138	232	F
95	Derwent	25.51	192	40	182	F
96	Central Plateau	31.17	314	82	237	F
97	West Coast	35.12	649	226	566	F
98	King Island	37.17	137	65	210	F
99	Flinders Island	27.69	197	10	301	F

N.B.—100 points = 1 inch.

H. A. HUNT, Commonwealth Meteorologist.

Australian Rainfall Map.

N.B.—100 points = 1 inch.



Seasonal.

The season is still progressing steadily and favourably towards an auspicious winter, every State having experienced more or less useful rains during the month. New South Wales has had some good falls that have been practically general, and though there may be districts here and there which are on the dry side, the outlook all round may be described as good—as far as the actual season is concerned. Other prospects on the land are unfortunately a different story. Queensland has had some very heavy rain, notably in the south-west, some of the central districts and in the north. The Burnett and Wide Bay and south coastal areas are still inclined to dryness, but, generally speaking, there should be plenty of feed for the winter. Victoria is in fair to good order, but rain in the Wimmera, Mallee, Western and Central Districts would not be amiss. The north received some heavy falls at the end of last month. Recent rains in Tasmania have improved prospects consider-

ably, as the pastures had dried up very pronouncedly. They have now had a good freshening, and there is plenty of feed for this stage of the season. South Australia has had an exceptionally heavy burst of rain, causing floods and wash-aways, particularly in the north, and drowning considerable numbers of cattle and sheep. The sub-soil, however, has had a thorough soaking, and with further falls this month or next, the winter will open very well. In Western Australia the summer, especially in the south and south-west, has been one of the most trying ever known, with a continuous range of very high temperatures. Rain is wanted to relieve the parched-up country in these parts, but in the north, from Kimberley down to Sharks Bay, there have been welcome heavy rains almost generally, giving grass and plant life a good start. New Zealand is somewhat patchy, good rains in the Auckland, Taranaki, Canterbury, Otago, and Southland provinces having been very welcome for the revival of pastures. Hawkes Bay and the southern parts of the North Island, however, have had a dry spell, and pastures, particularly in the former, are decidedly bare and dry.

On the Wallaby.

Micalago, N.S.W.

BY A.W.P.

A recent visit to Micalago, the estate of the late Alexander Ryrie, and present home of General Sir Granville Ryrie, Assistant Minister for Defence, although short, was quite enjoyable. On arrival at Michelago railway station (situated some 40 miles to the north of Cooma) in the early morning, I was met by Mr. J. H. Fairbairn, the energetic manager, and driven out five miles to the homestead where Mrs. W. M. Ryrie lives, and who acted as my hostess during my visit. It was a pretty trip, with the sun just rising over the Tindarey Mountains. Just after we left the line we passed an iron deposit, which the Hoskins, of Lithgow, had just pegged out. On arrival, and after a refreshing cup of tea, I was shown the surroundings. About 100 yards away, across the garden, is where Lady Ryrie lives, in a house which is being thoroughly renovated. At her house, where I had dinner, I met Colonel Ryrie's wife from Melbourne, whose son had just gone to Duntroon, and Lady Ryrie and her two daughters. A feature of this station is the twelve enormous poplar trees in front of the home, planted over sixty years ago by the late Mr. Alexander Ryrie, some of them 18 to 20 ft. in circumference. A grand old English garden, full of English trees, such as oak, poplar, laburnum, lilac, and may, besides many kinds of fruit trees, makes this home very delightful. An ideal garden this for "spoony" couples.

Micalago Station consists of 20,000 acres of freehold and C.P. land, open rolling downs, with a background of mountains, from which running creeks run through the property, and Mr. Fairbairn is fast bringing it into a condition of perfection. Already he has dug out and rabbit-proof netted nearly two-thirds of the run, and was about to start on a 1500 acres section at the Cooma end when I was there. The difference was most noticeable. I didn't see a single rabbit on the dug-out country, but swarms outside the fence. One paddock of 1500 acres, which three years ago ran 600 sheep badly, now runs 2000 sheep, besides some cattle, and runs them well.

During a long day's drive over the run I was interested to see how well lucerne was doing, even on the ridges. Mr. Fairbairn only plants it for grazing purposes, and has it growing in several of his paddocks. At present he runs 16,000 Merino sheep, Boonoke and Warrrah blood, and about 200 head of cattle, and hopes to be easily able to run a sheep to the acre when it is all dug out. He was busy dipping the flock whilst I was there, and is a great Cooper advocate, taking great pains with the mixing. He gets the best results from dipping, because he studies all the fine points in connection with the operation. For instance, he has splendid shade trees in the vicinity of the draining pen and yards, and it is quite clear that he has found out the great benefit of drying sheep after dipping in the shade, instead of turning them out wet into the sun. The main reason for my visit was not to see the sheep, but the Hereford stud, and the cattle before they left for Cooma and Sydney shows. Mr. Fairbairn has made a hobby of these Herefords, and is no doubt going to make his mark. He deserves to, and already has some good young stock.

After experience with Shorthorns and other breeds, it was decided that Herefords did best on this country, with its

severe climate, the property having a 2300 ft. elevation, so all other breeds were sold, and they stuck to the white faces. The first purchase was 48 yearling heifers from Mr. John Gillies, of Walcha. These were by King Rossmore, bred by Mr. W. H. Yelland, Victoria. The dam of the bull secured sixteen firsts and five championships at the Melbourne and Sydney shows. They next purchased the stud bull, Monte Carlo 3rd (732 A.H.B.), bred by Percy Reynolds, Hobartville, which won first prize 1917 at Sydney Royal. He was sired by Montebello (587 A.H.B.), dam Purity 11th, this cow being a winner of many first and champion prizes, and never beaten in a show ring. Monte Carlo 3rd is a bull with great length and good depth of body, with an excellent head, quite Hereford type. At the Royal Sydney 1918 a half-brother of this bull sold for 600 guineas, and two sisters for 460 and 320 guineas respectively. The next purchase was eight heifers from Sydney Reynolds, Duninald, followed by show heifers from J. A. Beattie, Vic., and from Sydney Reynolds.



DIPPING 16,000 MERINO SHEEP AT MICALAGO.

A young bull, The Lion Tamer, 17 months, sired by Monte Carlo 3rd, dam Lioness 96th, which is going to be exhibited this year, is an excellent specimen of the breed, and should make a good showing; a judge might say he handles a bit hard, anyway that would be his main fault if he has one. A photo of this fine beast appears on p. 188. [He won the championship for best bull in the yard at Cooma Show on the 10th inst.—Ed.] Other photos I took were of the stud cows Careless 87th and Duchess 25th, the former two years and four months, bred by Sydney Reynolds, by Eaton Banner (imp.), and highly commended Sydney Show, and the latter two years and three months, 3rd prize Sydney Show, bred by Sydney Reynolds, by Ambassador. I also saw a nice lot of stud cows and calves, and excellent steers, all doing well.

The words of Mr. Fairbairn about fill the bill: "As our main object is to build up a select herd of good quality cattle, we cull very heavily, and only keep what we ourselves would buy. We are not going for quantity, but for quality, even if the herd is kept small. All our herd bulls are taken in along with the studs, as our winters are so severe. These are fed during the winter months, and we do not sell a bull until after his first winter. This means that our bulls are ready for work when the buyer gets them. We have letters from all our buyers, which speak for themselves as to the way they do, and asking for further drafts."

Last year was the first time the Micalago herd was shown in the ring. They gained nine firsts and one second at local shows, and a third in a field of 36 at the Royal, Sydney, in the bull yearling class. Altogether the stud has made a good start, and with its energetic manager, a lover of the breed, should have a great future.



Photo by Hall.

SOME FINE POPLARS OPPOSITE MICALAGO HOMESTEAD, N.S.W.



1. A GOOD MUSTERER AT MICALAGO.
2. STUD HEREFORD BULL, THE LION TAMER, 17 MONTHS, BY MONTE CARLO OUT OF LIONESSE 96TH.
3. ONE OF THE HOMESTEADS AT MICALAGO.
4. Left to right—STUD HEREFORD COWS, CARELESS 87TH (2 years 4 months), and DUCHESS 25TH (2 years 3 months).
5. STUD HEREFORD COWS AND CALVES.



AERIAL VIEW OF THE ROYAL ALBERT DOCK, LONDON.



AERIAL VIEW OF TILBURY DOCK, LONDON.
DOCKS OF THE PORT OF LONDON AUTHORITY.



CHAMPION LINCOLN RAM.

Exhibited by the New Zealand and Australian Land Co., Moeraki Estate.



CHAMPION CORRIEDALE RAM.

Exhibited by the New Zealand and Australian Land Co., Moeraki Estate.



CHAMPION HEREFORD COW.

Exhibited by Mr. L. C. Hazlett.



CHAMPION DRAUGHT STALLION, SCOTLAND'S VICTOR.

Exhibited by Messrs. Thomson & Co., Wai-rongoa. Also Ch. at Invercargill, 1920.

SOME CHAMPIONS AT THE OTAGO SUMMER SHOW, DUNEDIN, N.Z.



CHAMPION ROMNEY MARSH RAM (AUCKLAND).
Exhibited by Mr. A. D. Bell, Clevedon.



CHAMPION ROMNEY MARSH EWE (AUCKLAND).
Exhibited by Mr. W. Johnstone, Papatoetoe



CHAMPION HEREFORD BULL, CHANCELLOR 25TH (FEILDING).
Exhibited by Mr. A. E. Sandilands.



CHAMPION LINCOLN RAM (FEILDING).
Exhibited by Mr. W. Howard Booth, Carterton.



CHAMPION ROMNEY MARSH RAM (FEILDING).
Exhibited by Mr. W. F. Jacob, Kiwitea.



CHAMPION SOUTHDOWN EWE (FEILDING).
Exhibited by Mr. J. Knight.

CHAMPIONS AT THE RECENT AUCKLAND AND FEILDING SHOWS, N.Z.



AN OX TEAM CARTING WOOL FROM VEREENIGING, TRANSVAAL

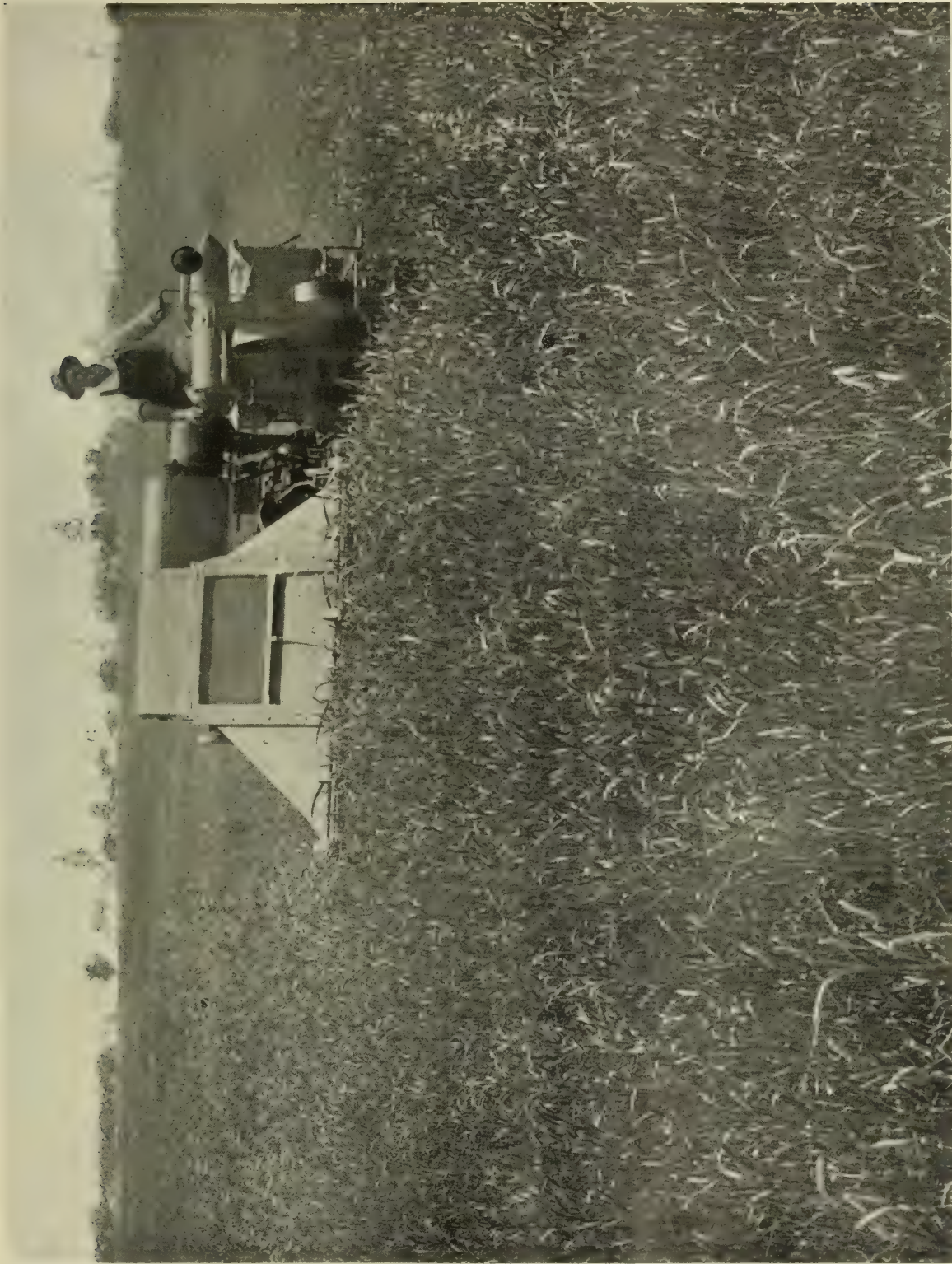


A SHEARING SCENE AT VEREENIGING. BASUTO SHED HANDS AND SHEARERS.



SHEARERS AND SHED HANDS. THE MANAGER, MR. J. T. HOSFORD, IS SEATED IN THE FRONT ROW, WEARING A COAT.

VEREENIGING, TRANSVAAL, SOUTH AFRICA, THE PROPERTY OF THE VEREENIGING ESTATES LTD.



A HORSELESS HARVESTER AT WORK IN THE ARIAH PARK DISTRICT, N.S.W.



FISHERMAN (IMP.).

(See "Blood Sires," by "Fife and Drum.")



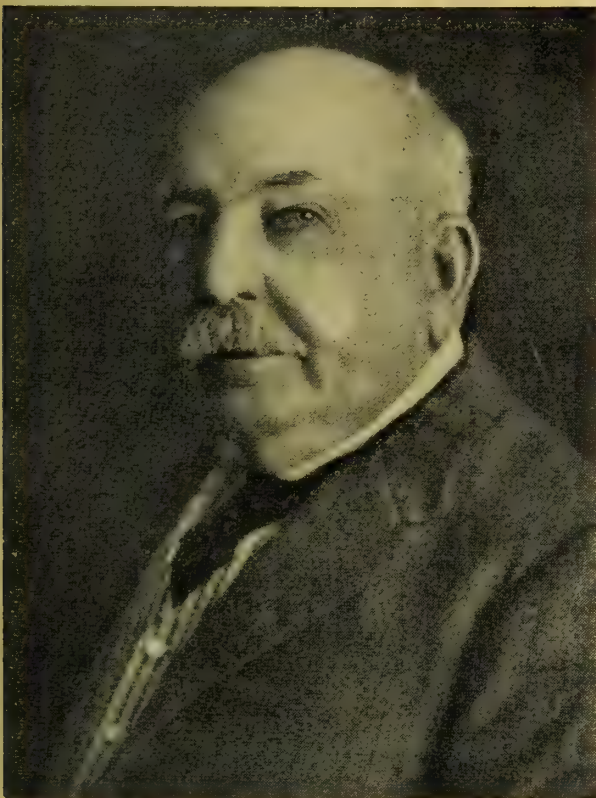
HEREFORD BULL, MANSEL HANDYMAN, BRED BY CAPT. R. T. HINCKES, MANSEL COURT, HEREFORD, ENG.

Mansel Handyman was Champion at Hereford and Worcester Show last year, and Reserve Champion at the English Royal. The picture is a photo of an oil sketch by Mr. Frank Calderon, R.A., a well-known animal painter, who has had works in the Academy for many years.

Obituary.

De Burgh Persse.

The death of Mr. De Burgh Persse, which took place the middle of last month, causes a considerable gap in the fast thinning ranks of pioneer pastoralists in Queensland. Born



THE LATE MR. DE BURGH PERSSE.

at Moyode Castle, County Galway, Ireland, he first arrived in Brisbane on 8th March, 1863, by the ship "Golden City." He was then about twenty-three years of age, and promptly went into the bush, going to Arthur Downs Station, 70 miles from St. Lawrence, on the track to Clermont. From there he shortly after set out with Mr. Arthur McKenzie and a thousand head of cattle to stock May Downs. Illness caused him to return to Brisbane, but after a short spell he went to Tieryboo, on the Condamine, and later as manager to Tambourine Station, on the Albert River. His next move was to Mr. T. Murray-Prior's Marroon Station, but very shortly after he purchased Tabragalba, Beaudesert, with which property he was associated until the time of his death. During a visit to the Old Country in 1870-72, Mr. De Burgh Persse married, and on his return to Queensland he established Palparra and Connemarra Stations on Farrar's Creek, Tally-Ho on the Mayne, and Buckingham Downs on the Wills. These he subsequently sold, purchasing Hawkwood and Yeurilla, in the Burnett district, which he held in partnership with his son Charles. Later he bought Eidsvold Station, where his son-in-law and partner, Mr. Fitz Pierce Joyce, resides.

Throughout his long and useful life Mr. De Burgh Persse always closely identified himself with every movement directly or indirectly connected with the pastoral industry.

He was one of the founders of the Queensland Meat Export Company Limited, and for many years chairman of directors. He was also chairman of the Australian Stock Breeders' Company Limited, and held the office of president of the Beaudesert A. and P. Society, and Jockey Club.

Captain John Burns.

Captain John Burns, second son of Sir James Burns M.L.C., principal of the firm of Burns, Philp and Co. Limited, died at his residence, Shaftesbury, Cootamundra, New South Wales, on 25th February, in his 35th year.

After studying at King's School, Parramatta, Mr. Burns entered commercial life for a period, but relinquished it in favour of pastoral pursuits, acquiring interests in various New South Wales and Queensland station properties.

Upon the outbreak of hostilities he enlisted, and served three years at the front—at Gallipoli, Egypt and Palestine—rising to the rank of captain. At Gallipoli he was General Walker's A.D.C., and held the Gallipoli Star.

The late Captain Burns was a partner in the firm of Burns and Johnston, and his pastoral interests were mostly confined to Queensland, the first property owned by him being Pike's Creek, in the Stanthorpe district, while later on he was interested in Cotherstone, Consuelo, Tilpal, and Tarbrax Stations, and also Bunda Bunda Station, Richmond, at which property he resided for a time. At the time of his death he was also interested in Nelia Ponds, Bushy Park, Turn-off Lagoons, and Egilabria, all cattle properties situated in North Queensland, while recently he acquired Shaftesbury Estate, in the Cootamundra district, where he was residing at the time of his death.



THE LATE CAPT. J. BURNS.

He returned from the war in indifferent health, and his death was due to a series of complications, arising from the illness caused by his services at the front. The late Captain Burns was most popular, and enjoyed a wide circle of friends, both in Queensland and in New South Wales.

Bone Weakness in Lambs.

Can any of our readers advise us of a lick that will strengthen the bone of highly-fed lambs? Cases have come to our knowledge of stud lambs, which, if forced, bend in the bone, indicating a deficiency in the soil in some respects, as neighbours who force more, on a different class of country, but with the same breed of sheep, are not troubled in a similar manner.

Notes of Interest.

COMMUNISM NOT WANTED.

Mr. E. T. Bell, M.L.A., Queensland, returned recently from a visit to various parts of the world, including Argentina. He met a number of descendants of the communistic settlement at Cosme, Paraguay, where John Lane made his fantastic failure. He found some descendants of the Australians who founded the colony, as well as some of the original partners, but none of them want communism; they are satisfied with individualism.

BELATED STOCK RETURNS.

On the third of the month the Stock Department of New South Wales issued returns showing the approximate number of live stock in the State, as on 31st December last. Be it remembered that 10th January was the last date stockowners were allowed by which to have sent in their returns, yet we find that it is estimated that 20 per cent. of the sheep had not been accounted for, and nearly the same proportion of cattle and horses. Surely there is some gross negligence somewhere. The number of sheep actually returned in the State is given as 25,315,996, and it is estimated, which is open to great doubt, that there are another 4,585,705 sheep knocking about somewhere. Why the odd 5 is not stated. There are also supposed to be 424,670 cattle and 76,843 horses missing, in addition to the 2,430,207 and 419,560 given respectively as returned.

THE ISLAND MANDATE.

An advance copy of the mandate granted to the Commonwealth Government for the administration of former German territory in New Guinea and the former German islands in the Pacific, south of the equator, has arrived. The most important clause is as follows:—"The Mandatory must ensure freedom for all nationals of any member of the League of Nations to enter into, travel and reside in the Territory for the purpose of prosecuting their calling." This stops any hopes our politicians and Trade Unions may have held of bringing in a law prohibiting Japanese, Indians, or other Asiatic races from having their share of the trade of the Pacific Islands. Any restrictions they may wish to enforce on nations who are members of the League will have to be submitted to the permanent Court of International Justice, and it is not probable that our extreme restrictive views would receive much consideration before that body.

THE BASIC WAGE IN QUEENSLAND.

In Queensland the Arbitration Court has laid down a basic wage of £4 5s. in the southern and central districts under certain conditions, which, to say the least, are very confusing. The decision is not to be automatically applied to industries; application must be made by the union. A lower minimum may be applicable if the special circumstances of such industry warrant it. In other cases the court will take into consideration the average prosperity of the industry and its freedom from strikes. An extraordinary number of applications for revision naturally have been lodged with the court, and some time must elapse before these are settled. It may be expected that where the court does not award the full minimum there will be a great deal of dissatisfaction, and one looks for further unrest instead of industrial peace. Perhaps the most peculiar part of the whole proceedings is that the court created by the Labour Party in its present form has not given a decision that commends itself to the Labour Government, as the basic wage as fixed is to be opposed by the Government when the public service cases are listed for hearing.

PUNISHING CATTLE STEALING IN QUEENSLAND.

Two men, Hall and Johnson, appeared at the Cloncurry Police Court last month, charged with having stolen four calves, the property of the Coolullah Pastoral Company, and seven calves, the property of the South Australian Mortgage Company. Hall pleaded guilty to a charge of having branded calves belonging to Kamilaroi station, and was fined £25 in respect of each beast, with £1 1s. professional costs, and 3s. 6d. costs of court, or a total of £108 18s., in default six months' imprisonment. Charged with having illegally marked four beasts, a fine of £10 for each beast, with costs, amounting in all to £44 was inflicted. Charged with having defaced the brand on a cow and a calf, a fine of £20 for

each beast, or a total of £41 4s. 6d., was inflicted. Patrick Milne Conway, charged with having illegally branded seven beasts, the property of McMaster Bros., and one beast belonging to Collins and Sons, was fined £20 on each charge, together with costs, in default six months' imprisonment. These punishments are much more likely to have a deterrent effect on cattle-lifters than some of the easy sentences that have been imposed in the past, but the surest means of putting a stop to the "industry" is imprisonment without the option.

LOAN BY FORCE.

The Queensland Government obtained its loan of £2,000,000 by voluntary effort, after alternately coaxing and threatening. The purpose of the loan was set out as being for the completion of the north coast line, and some other necessary works, and while the loan is used for that purpose there could be no objection to the appeal for money. But there is no guarantee that it will be so used; and certainly there is no guarantee that the Government will inaugurate a policy of retrenchment to enable it to live within its income. On the contrary, the Treasury returns month after month show absolutely no evidence of any economy. The future policy of the Queensland Government is somewhat obscure. It is apparent that it cannot go on without much more loan money than it has raised; that it is in a chronic state of being hard up. But it is also not apparent how it can obtain much more money locally. The fact that the loan was quoted at a discount of 5 per cent. as soon as the stock was on the local market showed that many persons had made investments from a sense of loyalty when they could not really afford the spare cash. There cannot be much more money available for investment in stock; what was given must have had a serious effect on trade and industry by diverting money from those channels.

RECOVERY OF BRITISH TRADE WITH AUSTRALIA.

The following figures illustrate the marked recovery of British trade with Australia since the war. They are compiled by Mr. S. W. B. McGregor, Senior British Trade Commissioner in Australia, from information supplied by the Commonwealth Statistician, and show the percentages of competitive imports from the United Kingdom, United States of America, and Japan. By competitive imports is meant those goods in which the United Kingdom is interested as a competitor. The figures show an increase in British trade from 46.6 per cent. in 1918-19 to 54.29 per cent. in 1919-20, although the pre-war level of 63 per cent. had not then been regained. American trade during the period named decreased from 29.3 per cent. to 24.9 per cent., while Japanese trade also decreased from 11 per cent. to 5.39 per cent.

Since the close of the Commonwealth trade year, 30th June, 1920, a further remarkable increase in British trade has occurred. An approximate estimate shows that for the six months ending 31st December, 1920, the proportion of British competitive imports has further increased to 67 per cent. In the same period American imports have decreased to 11 per cent., while Japanese imports remain stationary at 5.4 per cent.

MR. THEODORE'S VIEWS.

It is interesting to note that Mr. Theodore, Premier of Queensland, at a recent meeting of the Labour Day Celebration Committee in Brisbane, in giving his impressions on the labour movement in America, England, Russia and other countries, expressed himself in no uncertain strain regarding the Soviet system. "A man would be an arrant fool and a hypocrite," he said, "if, in a country like Australia or England, where the workers could accomplish anything they desired, he thought that Russia taught them any beneficial lesson."

Also in an address at the Trades Hall on the subject of the basic wage, Mr. Theodore gave utterance to some rather sound sentiments. He said that they had to see that the workers themselves recognised their obligations to the community. There were some workers who were prepared to loaf on the job, and some who carried on active propaganda of slow-down—a doctrine that had never been countenanced by the labour movement, and that could never be consistent with any idea of progress. The men who resorted to that kind of sabotage never had accomplished, and never could accomplish, a salutary reform for this or any other country.

It is some consolation to realise that Mr. Theodore's views are not quite so extreme as some of his actions have led us to believe. Possibly he sees the urgent necessity of departing from some accepted labour shibboleths in the interests of the State generally.

News Gleanings.

A new world's record high jump for a horse ridden by a woman was established at the Newcastle (N.S.W.) Show last month. Miss Eily Roache, riding Musician, cleared 7 ft. 1 in.

The 1921 English Royal Show is to be held at Derby on 28th June to 2nd July. Cambridge is to have the show in 1922, Newcastle-on-Tyne in 1923, Leicester in 1924, and Chester in 1925.

British East Africa has been renamed, and is now called **Kenia Colony**. It is to have a Parliament of its own, members to be elected by the colonist community. The Colonial Office retains a voting power as a check on too advanced views.

The Australian Government has purchased 1,000,000 sacks of sugar in Cuba. This is now being shipped. Result of endeavouring to grow sugar in Australia with white labour! We eat sugar grown by black labour, and pay a high price by way of bonus to our sugar growers to enable us to do so.

A Yorkshire wool expert, Mr. Biddle, is reported to have picked on Albany as the most suitable site for the establishment of a worsted mill in Western Australia. He believes that a mill capable of manufacturing 200,000 yards of cloth annually can be erected for £250,000, and be a commercial success.

Since the opening of civil aviation in May 1919, British aircraft have flown 1,556,000 miles, and carried 106,712 passengers. There were forty-eight accidents, of which twenty involved injury to personnel. The ratio of passengers killed was decimal ten per 1000 carried, and 33,100 miles were flown per accident.

Aeroplanes are slowly coming into use in the pastoral community, Mr. R. S. Falkiner, who is one of the latest to fly his own machine, having last month travelled from Groongal, in Riverina, to Melbourne, a distance of 275 miles, in the flying time of 2 hours 29 minutes. Mr. Falkiner's plane is a 100-h.p. Boulton-Paul.

The British Chamber of Shipping estimates that at the end of January 5,000,000 tons of shipping (dead weight) was laid up in British, American and Scandinavian ports. The reasons given are absence of cargoes and expansion of the world's tonnage. The total tonnage to-day exceeds 60,000,000, compared with 50,000,000 in 1914.

The total cost of ships built in the United Kingdom under the control of British Ministry of Shipping was £36,500,000, and vessels built abroad cost £27,000,000. The boats have been sold for £36,000,000. The use of the ships for the carriage of troops and goods is estimated to have saved the nation £27,000,000 during the war.

The Canadian Co-operative Wool Growers' Company Limited last year sold 3,400,000 lbs. of wool on behalf of clients at an average of 1s. 3½d. a lb. Of the sales 45 per cent. was bought by Canadian firms, 51 per cent. by American, and the balance by British manufacturers. The company has been in operation a little over three years.

The Queensland Labour Government apparently dislikes *The Review* reaching the managers of their stations. Probably it hits the nail on the head too often for their peace of mind. Anyway, we have received instructions to stop sending it to their stations in future. No doubt the managers will still see it, as it goes to nearly every sheep and cattle man of any importance in that State.

The president of the Stockowners' Association of New South Wales, Mr. C. Binnie, in response to inquiries re shipment of salted horse from Canada to Europe, has received a reply from the Veterinary Director-General at Ottawa saying that no such trade is now being carried on in Canada, although a few years ago salted horse was shipped to Sweden. Since then, however, the Swedish Consul has refused his vise, and the trade has absolutely stopped.

A builder, writing to an American paper, gives the following information relative to the cost of erecting "Australian" shearing sheds in the United States:—The contract price for a number of 20-stand plants put up by him in various parts of Wyoming ranged from £640 to £860, according to location. Also he built a 16-stand plant for £900 and one of 10-stands for £560. These prices are all exclusive of machinery.

Mr. E. T. Bell, M.L.A., of Coochin Coochin, Q., during a recent visit to South America was greatly impressed with the cattle country in Argentina, Paraguay, and Uruguay, and with its carrying capacity under the influence of alfalfa. At Buenos Aires he saw a bull sold for £11,000, and others at very high prices. The quality of the cattle generally, he said, was very high, owing to the prosperity of the industry, thanks to the export of chilled beef.

The Metropolitan Farm, Werribee, Victoria, where the sewage of Melbourne is utilised for irrigation purposes, is evidently a well-managed concern. The total area is 12,556 acres, of which nearly 7000 are irrigated, and at the present time carry 5782 head of cattle, besides calves, 5120 sheep, and 334 horses. The profit on the farm trading account for last year was £41,061, and after charge cost of sewage purification and interest on capital, a net profit of £5661 is shown.

The Queensland and Northern Territory Aerial Service Limited, the company which is linking up the railheads of Central Queensland with far western centres, has recently imported the first commercial triplane into Australia. The machine is provided with a comfortably-fitted enclosed cabin, with accommodation for four passengers, who are protected from the weather and most of the noise. The power is supplied by a 160-h.p. Beardmore engine, attaining a speed of up to 90 miles an hour.

The British Government has fitted up the sloop "Dahlia," of 1200 tons, for the Ministry of Agriculture to make investigations with a view to stamping out foot-and-mouth disease. She will be stationed at a selected spot off the coast, and no communication with the shore or with other vessels will be allowed. Her fittings comprise laboratories and all essentials for the study of the disease. A lighter will be attached to her. The research will be conducted by officers of the Board of Agriculture, and by a body of scientists.

Congressman A. T. Smith, of Idaho, U.S.A., in urging the Agricultural Committee to support the U.S. Sheep Experiment Station at Dubois, Idaho, presented a statement in which he said that Corriedale sheep had been imported from New Zealand in 1914, and were being studied in comparison with Lincoln-Rambouillet and other crossbreds. The development of the Lincoln-Rambouillet crossbreds had been quite an achievement in animal breeding and had progressed so well that the name "Columbia" had been given to the sheep. The type had become quite well fixed in a remarkably short time (five years).

W. Weddel and Co. Limited, in their annual review of the meat trade, indulge in trenchant criticism of the Imperial Government's policy of holding stocks of frozen meat in Great Britain last year. It is stated that the action is just what would have been expected from any financially strong speculator owning large stocks, and had worked out successfully so far as avoidance of loss is concerned. However, the taxpayer only gained by the consumer being compelled to pay inflated prices for meat. Sort of robbing Peter to pay Paul business. As the report says, food control has become a synonym for increased cost of living.

The Germans, when occupying Asiatic Turkey during the war, carried out a wonderful anti-locust campaign in Western Anatolia. For the purpose a staff of 14 directors, 72 officers, 2000 supervisors, 11,000 men from labour battalions, and large compulsory levies from the population was organised. From March to May 1916 an average of 450,000 to 500,000 workers were employed daily, and 6000 tons of locust eggs and 11,000 tons of locusts were actually collected. The barrier and pit system of trapping was the chief measure used. Poisoning was also resorted to with success, but no practical results were obtained with fungoid and bacterial diseases. History does not say if the pest was any lighter in subsequent years.

Personal.

Mr. Benjamin Culley died at Urana, N.S.W., on 11th February, aged 96 years.

Mr. D. McCowan, of the Lowmead district, Queensland, died recently, aged 54 years.

Mr. Abner Haylock, late of Kingston Park, Gunbar, N.S.W., died recently in Melbourne, aged 77.

Mr. C. A. Haley, part-owner of Booberoi Station, Euabalong, N.S.W., died recently, aged 49 years.

Mr. S. G. Black, of Glenormiston, Western District of Victoria, is leaving on an extended trip abroad.

Mr. James Pearce Smith, pastoralist, died at Howlong, N.S.W., at the end of last month, aged 82 years.

Mr. W. F. Heffernan, of Junee, N.S.W., a well-known pastoralist, died suddenly last month, aged 55 years.

Mr. C. H. Ellerman, well-known auctioneer at Young, N.S.W., died suddenly last month, aged 68 years.

Mr. A. W. Johnson has been appointed branch manager for Victoria of the Orient S.N. Company Limited.

Mr. John Lewis, Mundi Mundi Station, Western New South Wales, sailed for Europe by the "Narkunda" early in March.

Mr. C. H. B. Leonard, late of Gloria Estate, near Villiersdorp, Cape Province, South Africa, died in Capetown on 13th January.

Mr. G. A. Lloyd, one time part owner of Terembone Station, Coonamble, N.S.W., died early in February in Sydney, aged 77 years.

Mr. William Price, manager of Aldingham Station, Winton, Q., was killed as a result of a motor accident when driving into town on 1st March.

Mr. S. Williams, of Woodbine, Brookton, W.A., died on 13th January, aged 71 years. He was much respected by all with whom he came in contact.

Mr. R. G. A. Robertson-Cunningham, of Wellington Vale, Deepwater, N.S.W., proposes to proceed to London by the s.s. "Ascianus" next month.

Mr. C. W. D. Conacher, managing director of the North Australian Meat Company, left Sydney on 1st March in the s.s. "Mataram" for Darwin.

Mr. Roy White, third son of the late H. C. White, of Havilah, and who was interested in the Loudon estate, Dalby, Q., died recently in Sydney, aged 45 years.

Dr. Valdez, representing the Portuguese Government, has been in Sydney recently purchasing blood stock cattle for the improvement of the herds on Timor Island.

Mr. C. H. Croomer, British and Argentine Meat Company Limited, London, after a trip to New Zealand and Australia, left for London by P. and O. s.s. "Narkunda."

Mr. Simon Matheson, for many years manager of Buckland Park Station, and latterly associated with Wilgena Station, north of Port Augusta, S.A., died during February.

Mr. E. T. Bell, of Coochin Coochin Station, Boonah, Q., has returned from his trip round the world. During his tour he visited Argentina, Paraguay, and Uruguay.

Mr. Harry S. Thompson, manager beef department of the Wm. Davies Co. Limited, Toronto, Canada, is spending a month in Australia after an interesting visit to New Zealand.

Mr. L. J. Rigney, of Bona Vista Estate, Avoca, Eastern Tasmania, died on 11th February after a short illness. He was well known as a sportsman and a rider after hounds.

Mr. D. J. Bourke, of Monomeith Park, Monomeith, Vic., died in Melbourne on 13th March. He judged the thoroughbred and pony classes at the Royal Agricultural Show for many years.

Mr. H. Teesdale Smith died suddenly in Melbourne on 25th February, aged 62 years. He was a well-known railway contractor in Western Australia and South Australia, and lived at Adelaide.

Mr. Walter Kidman, son of Mr. Sidney Kidman, has returned to Adelaide after an extended trip through Central Australia. He visited a number of stations and had a most interesting experience.

Messrs. A. M. Miller, Swaziland, South Africa, and E. W. Evans, Natal, South Africa, returned to Australia from New Zealand the middle of last month, and intend to return to their own country via Java and India.

Mr. G. D. Delprat has resigned his position as general manager of the Broken Hill Proprietary Company, and has been appointed consulting engineer. Mr. E. Lewis has been appointed general manager in his place.

Major E. A. Southey, newly appointed principal of Hawkesbury Agricultural College, N.S.W., arrived from the U.S.A. last month,

and has taken up his duties at the college. He holds a high record as a scholar, athlete, and soldier.

Messrs. A. M. and A. H. Angliss, members of the meat export firm of W. Angliss and Co. Prop. Limited, Melbourne, &c., sail for England by the "Osterley" the middle of this month. They expect to be away about six months and return via America.

Sir Thomas B. Robinson, K.C.M.G., late Agent-General for Queensland, and Controller of Imperial Meat Supplies during the war, arrived at Auckland last month on board the s.s. "Rimutaka." After a stay in New Zealand Sir Thomas intends to visit Australia.

Mr. C. J. C. Cameron, pastoral inspector for New South Wales for the Australian, Mercantile, Land and Finance Company Limited, has been appointed manager of the company's Barratta Station, Deniliquin. Mr. J. L. Bossley, of the Brisbane office, succeeds Mr. Cameron in Sydney.

Mr. Robert Bruce, one of the leading British authorities on the Shorthorn, who in 1917 went to South America to judge the breed at the Palermo and Montevideo shows, died in December last at the age of 80 years. As a judge of cattle, Mr. Bruce adjudicated on eleven distinct breeds, and officiated at over 160 shows.

Mr. J. M. Niall, managing director and chairman of directors for Goldsbrough, Mort and Co. Limited, and owner of Buckingham Station, Nyngan, N.S.W., left for England on the R.M.S. "Narkunda" 5th March. He intends to be away about nine months. Mr. J. A. M. Elder has been appointed acting chairman during Mr. Niall's absence.

Mr. D. M. Morgan has been appointed chief inspector for New Zealand of New Zealand Loan and Mercantile Agency Company Limited, in succession to the late S. Clarke Johnson. Mr. Morgan was until recently a member of the company's Australian staff, and latterly occupied the position of manager of Rockhampton branch.

Our Bradford correspondent, Mr. S. B. Hollings, lectured before the Bradford centre of the Institute of Bankers on 2nd December, and the local press describes it as a very interesting and practical lecture. The subject dealt with was "The Wool Trade and how it is conducted," special reference being made to the methods of handling and financing colonial wools.

The death took place in Brisbane recently of Mr. J. Baillie Henderson, formerly hydraulic engineer, and one of the earliest engineers associated with the sinking of artesian bores. Under his regime many hundreds of bores were sunk in the northern State. Before arriving in Queensland he carried out many notable engineering works in Victoria, including the water supply for various towns. He was 85 years of age, and remained active up to within a few days of his death.

The following new subscribers to "The Pastoral Review," from countries other than Australasia, have been received during the month:—Messrs. R. Magowan, Chile; Dr. A. F. Beyro, Buenos Aires; R. Grant and Co., Buenos Aires; C. H. Swift, Chicago; University of Wyoming, Laramie, U.S.A.; A. Smith, London; Faure Freres, Morocco; Wenz and Co., Roubaix, France.

Visitors to Melbourne Office.—From N.S.W.: Messrs. J. Sloane, Mulwala; Keith Brougham, Gnalta; H. P. Creswick, Liewah; Mrs. E. A. Macpherson, Wyalong; W. Spier, Sydney. From Queensland: Messrs. Conrick Bros., Nappa Merrie; G. R. Gillespie, From Victoria: Messrs. J. T. Thomas, Major Plains; E. Jackson, J. F. McNab, F. V. Murphy, R. J. Boyne, O. Morrice-Williams, A. W. Ferrin, H. G. Hawken, E. Boulton, H. M. Turner, H. Sharples, G. Officer, A. F. Hooper, Canon Hughes, Dr. Lang, Dr. Hornabrook. From England: Mr. H. Stansfield, London. From Canada: Mr. Harry S. Thompson, Toronto.

Visitors to Sydney Office.—From New South Wales: P. Cameron, Karoomba; Paul Wenz, Nanima; D. Reynolds, Tocal; C. A. Lillingston, Yulgilbar; T. Bowling, Arrawatta; G. H. Officer, The Cedars; A. Brunskill, Allonby; A. S. Carr, Chatsbury; R. R. Dangar, Mooki Springs; D. Macfarlane, Eureka; J. B. Sharp, Green Hills; A. Kerr, Mosman; G. L. Ryder, Quanda; N. N. Dangar, Palmerston; J. Fletcher, Ashfield; Dr. Fitzpatrick, Aberaldie; P. A. Chambers, Lower Lila; J. Coote, Cuerlind; E. R. Hall, Blalmore; W. A. Lang, Carlaminda; W. R. Scott, Kurrajong Hills; N. Mills, Uardry; F. D. McMaster, Dalkeith; W. Smith, Geurie; H. B. Blythe, Hill Station; R. J. Fagan, Sunny Ridge; J. E. Brooks, Deltroit; A. W. Perry, Boorawa; T. Loveridge, Burwood. From Sydney: J. S. Kuwahara, A. J. Bean, A. Lang, W. W. Beale, B. R. Gelling, W. W. Froggatt, R. N. Dangar, D. Carson, H. W. Potts, I. Moffatt, J. Carpenter, J. W. Simpson. From Queensland: C. Bunn, Bethbert; J. L. Gilmour, Dirranbandi; C. A. Coles, Tyrconnell Downs; E. M. Geery, Cameron Downs; A. J. McConnel, Dugandan; Dr. R. H. Harris, Brisbane; J. J. Laurie, Munboree. From Tasmania: H. Macarthy, From South Australia: Hon. D. J. Gordon, M.L.C., Adelaide. From Canada: Harry S. Thompson, Toronto. From Great Britain: C. H. Croomer, Major Boose, London; Walter Firth, Liverpool. From Victoria: Leslie Smith, Melbourne; L. N. Smith, Melbourne. From South Africa: A. M. Miller, Swaziland.

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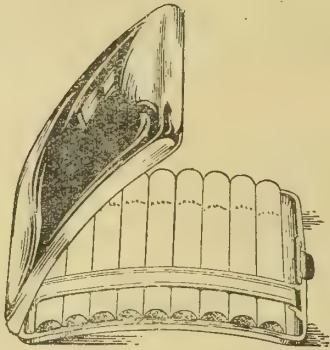
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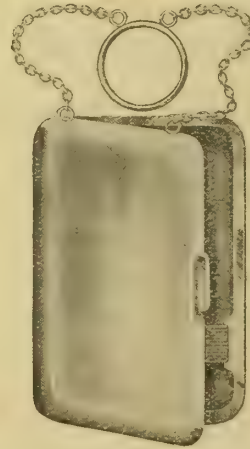
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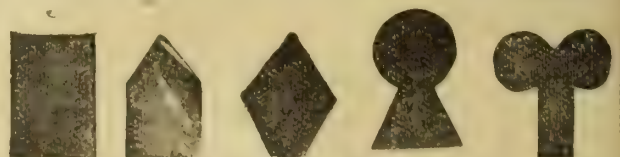
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In view of the monetary tightness now being experienced by Australia, in common with the rest of the world, one of the most important questions is that of the influence of Government expenditure as one of the causes of stringency. The success which attended the flotation of War Loans in Australia has given rise to some misleading ideas on the subject amongst politicians. While the war lasted the disposition amongst all classes to support the Government was reinforced by a state of artificial prosperity, based partly upon high prices obtained for wool, wheat, frozen meat, metals and other Australian products; and also by a slackening in fresh enterprise in the country, by which capital that would have been devoted in the ordinary course to productive employment was left free to be taken up by the Government for war purposes. Now, however, with a revival of enterprise, after the war, the country demand for money is supplemented not only by trading and industrial demands upon a substantial scale, but also by the tendency of the Commonwealth and State Governments to spend money on various objects at a rate exceeding that of pre-war days.

With a return to lower prices all round, accompanied by difficulty in realising the lower grades of wool, higher cost of production, and heavier taxation on the net result, it appears probable that fresh accumulations of money will be comparatively moderate for a time; while for the supply available the Governments are competing much more actively than before the war against private business people and producers. For strictly repatriation purposes this is doubtless justifiable, but other objects of Government outlay require much more critical examination when the supply of capital for private employment tends to run short. If Governments waste money on ridiculous State enterprises, on administration, on an ever multiplying civil service, and in innumerable other directions, the same

money cannot be used by graziers for the development of their properties, and the more capital the Commonwealth and State Governments absorb and fritter away, the less remains available for ordinary borrowers.

The principle involved is not peculiar to Australia. The International Financial Conference at Brussels about six months ago considered it imperative that every Government should not only restrict its ordinary recurrent expenditure to its ordinary revenue, but should abandon all unproductive extraordinary expenditure and should restrict even productive extraordinary expenditure to the lowest possible amount. Yet we see no genuine and concerted attempt to do this in Australia, and so give the country a chance to tide over the difficult times ahead.

A further important consideration is that not only have the public debts of the Commonwealth and the States increased, but the annual interest charge is growing in somewhat greater proportion, owing to the necessity of issuing conversion loans at higher rates of interest than those of the maturing loans. The Commonwealth Government has War and Peace Loans falling due from 1923 to 1930 for a total of about 233 millions. Between now and the end of 1930 the six States have about 186 millions to provide for in Australia and London, making a total of 419 millions for the Commonwealth and States together. Many of the State loans were originally issued at low rates of interest, and the issue of redemption loans at higher rates will mean that the customers of the railways and other public works will require to make up the difference, unless it is to be placed upon the taxpayers.

The effect of higher rates is illustrated by the last Commonwealth Peace Loan, subscribers to which had the option of converting an equivalent amount of previous loans. This has resulted in heavy conversions from 4½ and 5 per cent. stocks, maturing from 1923 to 1927, into the 6 per cent. stock, maturing in 1930; and while the conversion option proved valuable in ensuring the success of the issue, it has also added to the annual interest payable out of the taxes.

From whatever angle the matter is regarded, it is now of the first importance that Government borrowing should be limited to objects of the strictest necessity, and that even for such objects care should be taken to refrain from drawing too freely upon capital resources if ordinary productive enterprise is not to be hampered. Not only is this the case where loans are concerned, but in all forms of Government expenditure there must be vigorous efforts to put an end to the extravagance which characterises so much official spending. Graziers have a special right to demand this, as they are being particularly hard hit by the difficulty of obtaining accommodation consequent on the repeated attempts to satisfy the rapacious maw of Government, and accentuated by the shortage in the wool money. At the present moment many growers in New South Wales find themselves compelled, despite an excellent season, to sell their young breeding stock to the butcher for want of the financial resources required to carry on, and meet their drought commitments. What this means to the country, in view of the already calamitous shortage in our sheep stocks, is not difficult to realise, and it means practically ruin to the individual grazier who is thus compelled to suffer. It at least illustrates the urgent necessity for dealing with our financial problems at close quarters, and in a thoroughly serious spirit.

Making the Most of our Natural Pastures.

BY "TALGAI."

An intelligent observer travelling about Australia cannot but fail to notice that in many parts of the country the carrying capacity and sweetness of the natural pastures has, in more particularly the settled districts, declined. The principal cause of this is injudicious stocking. It is not so many years ago that the Darling Downs of Queensland were a field of waving grasses, which would top up good wethers to 80 lbs., and including such varieties as blue grass, kangaroo, oats, star, and many others, which in good seasons would grow 5 ft. high, and in bad ones would hold out and keep stock alive, where now the same land is a barren waste months before. It is a result of overstocking, by which is meant keeping the stock on the paddocks, not necessarily

above the carrying capacity, but by not allowing the grass to seed. Where this happens continuously the pasture begins to die out in patches, and on these a crop of herbage and noxious weeds spring up, which continue to spread, eventually choking out the good grasses. The result is that in a bountiful season there is a flush of weeds and herbage, which are good while they last, but disappear quicker than they grew before a hot, dry, scorching wind.

On the smaller areas and where the rainfall is copious artificial grasses and reseeded of the native ones can be accomplished, but on the dry plains of the interior this is hardly possible on a large scale. The only remedy that seems applicable is to divide the paddocks into as small areas as possible, and to shift the stock about so as to give each in turn a rest, and time to seed and recuperate after feeding off. When stock are grazed in small lots on small areas they tend to become more domesticated, and do not rush and travel about in large flocks and mobs, tramping the pasture down. The stock also benefit, they fatten quicker, because the whole secret of quick fattening is rest and contentment. How frequently does one see a flock of 5000 wethers all travelling across a paddock, raising a cloud of dust, to the deterioration of the wool, and if the leaders get startled the whole lot rush pell mell after them, ruining more feed by tramping it down than they eat.

If it were financially possible to fence a run of 100,000 acres, the carrying capacity of which is a sheep to the acre, into 3-acre paddocks, it is fairly safe to assume that three sheep could be put into each of these enclosures and left there continuously without making the slightest impression on the carrying capacity. It is admitted that in many instances the depredations of the ever elusive rabbit have been the main feature in ruining the pastures. There is also probably another fact; I put it for what it is worth, that wild indigenous grasses, like the native inhabitant (vide our brother abo.) will not survive the advent of, presumably, a more enlightened civilisation as practised by the white man. The English grasses that have for centuries been subject to cropping, have probably by some agency of natural selection so adapted themselves to a changed environment that they are able to withstand constant cropping, but even these must be attended to.

There are special departments subsidised by the Government to foster and improve our artificial pastures, such as lucerne, wheat, barley, oats, corn, which are all evolved from wild grasses by man through selection. Much thought and attention is given to our cultivated crops of hay, but how many times more valuable is the crop of Mitchell grass on the western plains of Queensland, the best grass of all, and the greatest labour saver, as it makes itself into hay as it stands when given the right season. It is not so disastrous, and in some districts a good thing, in such places as Tasmania, Victoria and other parts more favoured by rain, if the natural pasture, which is not always the best, disappears, for a better one can frequently be planted, but on the western Queensland plains if the crop of grass disappeared how could it on such large areas be replanted? Owing to the nature of the climate, nothing on any extensive scale in cultivation or resowing of grasses could be done, and it is almost a certainty that artificial grasses would not thrive.

It is nonsense to argue that the Mitchell grass cannot be eaten out, because it can. If the country is to be some day cut up into 5000-acre blocks, as at Combe Martin, and overstocked continuously, the Mitchell grass will thin out. This can be seen now on any of the reserves round the towns; these reserves are only weeds and saltbush where once was grass.

Making Bush Hay.

Where at all possible it must be agreed that the making and storing of fodder in times of plenty to provide against the lean years is sound economy. Many wild statements are made by those ignorant of the subject, who speak of making bush hay sufficient to feed 100,000 sheep on one property through a severe drought, still much can be done to store sufficient fodder to keep stud stock, working horses, and the more valuable and necessary animals alive. The greatest difficulty, apart from the cost and labour, is getting a patch of sufficient area suitable for cutting.

To make good hay it is necessary to cut the plant at the correct time. With grass such as Mitchell the most favourable time, as with most hay fodders, is just as the flower or head is forming. It is then fully matured without being dry, has the leaf on the stem, but without so much flag as at an earlier period.

The best machine for cutting is a reaper and binder, especially if a tall crop and on hot plains. The crop is more easily handled. Two men can follow a reaper and pick up the sheaves, putting them in stooks, say, a dozen stood on end in a circle, upright, with the heads all uppermost. In hot, dry latitudes the hay dries better, and keeps a better colour than when cut with a mower and laid flat on the ground. It must then either be raked up, which gets a lot of rubbish with it, or forked into cocks, which takes more labour and time. As the hay all lies straight in sheaves it chaffs better, but when put in loose a lot of loose straws get through the mouth into the chaff unless a riddle is used. The hay should not be allowed to get so dry as to become brittle, when the leaf falls off. If the hay gets wet after cutting and before carting it must be spread out again. A wetting deteriorates it, especially if it is nearly dry. Stacks should be thatched, and built on a platform a foot or so above ground; a shed is preferable. Some coarse salt put between the layers sweetens it.

War-time Profits Tax.

Section 15 (13).

Mr. R. Ewing, Commissioner of Federal Taxation, has issued a very useful little pamphlet on the above subject that will be of particular interest to all stockowners. He says:—

The question of the interpretation of section 15 (13) of the War-time Profits Tax Assessment Act is raised by a claim that the section permits a deduction from the profits of the current accounting period in, for example, a case in which live stock representing the natural increase of pre-war years is lost through drought during the war time, and is recouped by natural increase in a later year.

It is necessary to state clearly the scope and intention of the section in order that there may be no misunderstanding as to its operation.

The section is quite definite in stating that where profits arising in pre-war years are invested in the business and are subsequently lost, and that loss is shown to the satisfaction of the commissioner to have been recouped out of the profits of the current accounting period, a deduction from those profits is to be allowed of the amount of those profits so used.

The section also permits deduction of any other loss which, in the opinion of the commissioner, is recouped out of the profits of the current year. The words "any other loss" are, in my opinion, *ejusdem generis* with the words "that loss" in the preceding lines of the section, so that the application of the section should not be confined to the loss through drought of pre-war profits invested in the business, but may be extended to similar losses of similarly invested profits which arose during the war-time period.

The questions to be asked in dealing with these cases are—

1. Were any of the profits of the business—either in money or in kind—which arose since the commencement of the first of the last three pre-war trade years, or (if there has been no pre-war period), since the commencement of the business, invested in the business, and have they been subsequently lost through drought, adverse seasons, or other adverse conditions?

The profits in question may have been invested in the business in the shape of live stock (either by purchase or by natural increase obtained by breeding), or in the shape of improvements on the property, or by acquiring additional land.

The manner in which they were subsequently lost must be clearly shown to have been by drought, adverse seasons, or other adverse conditions.

The "loss" mentioned is not the net loss shown on total trading by the profit and loss account, but an actual loss of assets of the business.

2. What part, if any, of the profits of the current accounting period have been applied in extinction of the loss mentioned in (1)? If an examination of the facts shows that part of the profits of the current accounting period have been so applied, the amount so applied must be deducted from the profits of the accounting period in accordance with section 15 (13).

There are several main classes of case which will be discovered to exist. Some typical classes are as follows, namely:—

Note.—The lost live stock mentioned in the following cases is assumed to represent either natural increase which had previously represented income in the taxpayer's accounts, or live stock which had been purchased by him out of the business revenue.

Case 1.—Where, for example, restocking has been effected partly by purchase of live stock out of the revenue of the following year, and, as to the balance of live stock, by the natural increase of that year.

Case 2.—Where the net revenue from the sale of wool, stock, &c., during the year in which the loss of the asset (e.g., live stock) occurred, has been used to purchase stock which has replaced part of the lost stock. The balance of the lost stock has been made good by purchase by means of borrowed money which has been repaid out of the net revenue of the following year or years.

Case 3.—Where there has been a net profit on the year's trading, but where no part of the net revenue of the year has been available for use in restocking, and where the natural increase of the next year has been sufficient to replace the stock lost in the previous year.

Case 4.—Where there has been a net profit on the year's trading, and this has been used to purchase stock which has partly replaced lost stock, and where the balance of the lost stock has been replaced by purchase paid for out of the net revenue of the following year.

Case 5.—Where there has been neither a profit nor a loss on the year's trading—the value of lost stock balancing the net revenue from the sale of wool, stock, &c.—but where the net revenue was in hand and available for use in restocking by purchase, and where it was so used.

In case 5 there is no deduction under section 15 (13), because no part of the profits of an accounting period have been used to recoup the loss.

The lost stock has been replaced out of the business revenue of the year in which the loss arose. This is probably a very exceptional case which may not exist in fact.

If, however, any such case does exist, there is no power given under the Act to the commissioner or any other authority to allow any deduction in respect of the cost of restocking other than that allowed in the ordinary trading account under the heading "stock on hand at the beginning of the year," which will include the stock purchased in the year of loss.

In each of the other cases there is a deduction—

Case 1.—Of the cost of the purchases and the standard value of the natural increase.

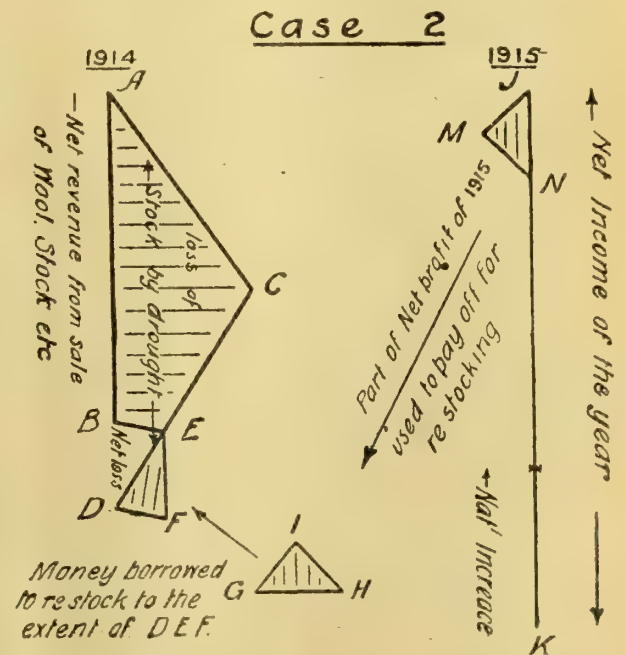
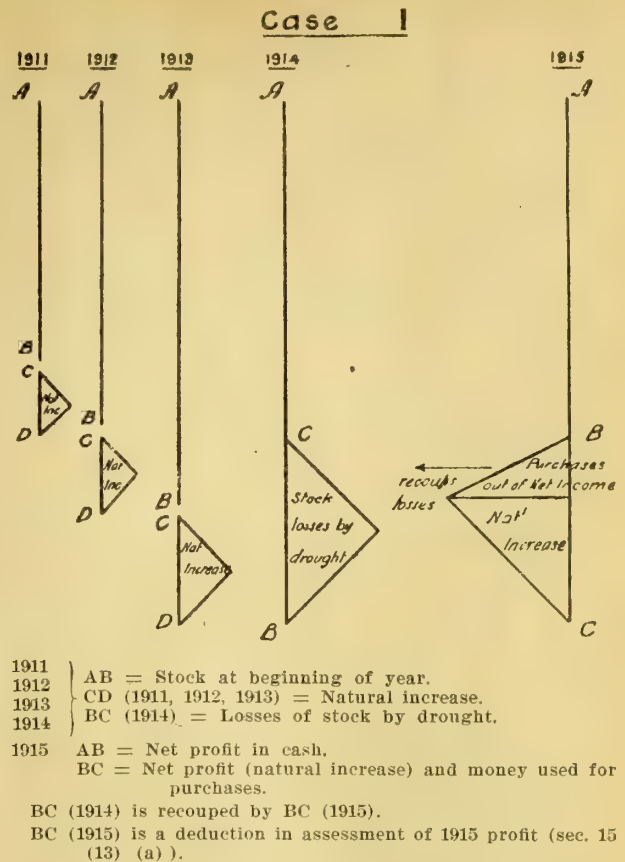
Case 2.—Of the part of the net profit of the second mentioned year which has been used to repay the money borrowed to purchase the live stock required to replace the balance of loss of the stock in the previous year after the net revenue of that previous year had been applied to replace the remainder of the lost stock.

Case 3.—Of the standard value of the natural increase which replaces the stock lost in the previous year.

Case 4.—Of the amount of the second mentioned year's net profit which was applied to replace that part of the stock lost in the previous year which had not been replaced by using the whole of the net revenue of that previous year. There would be a deduction in that previous year of the amount of the net profit used for restocking purposes.

It should be borne in mind that the losses referred to in this statement are not confined to stock losses, but to losses of assets which represent previous profits invested in the business.

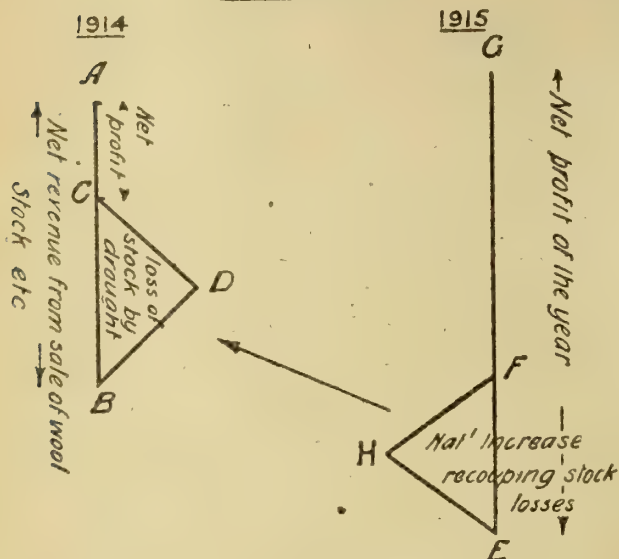
The accompanying five illustrations of the five cases mentioned will probably make clearer the operation of the section in respect of each of them.



ing at once and paying off out of next year's revenue, or may await purchase out of that revenue.

JMN represents 1915 net profits which have been used to recoup 1914 stock losses, and is the deduction under section 15 (13).

Case 3



AB = Net revenue for 1914 from sales of wool, stock, &c.

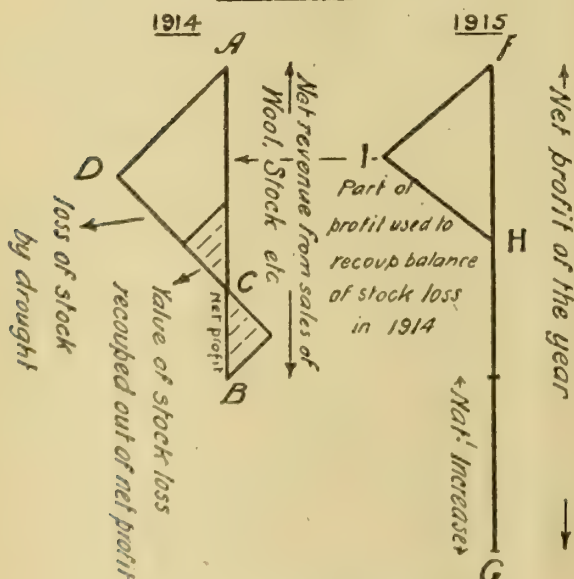
BCD = Value of stock lost by drought.

Assume that net revenue AB cannot be used to restock, or is not, under any circumstances, so used, and that the loss is made good by natural increase of 1915.

FE = Natural increase of 1915 corresponding in value to BCD (loss of stock in 1914).

FE is the deduction in 1915 allowable under section 15 (13).

Case 4



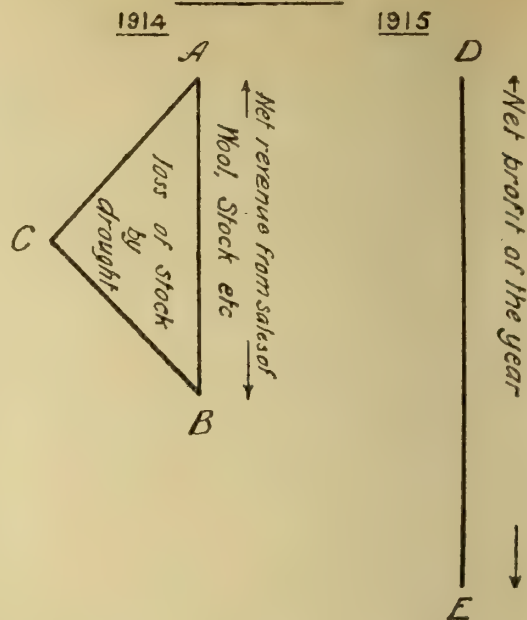
AB = Net revenue from 1914 sales of wool, stock, &c.

ACD = Value of stock lost by drought.

Assume that AC, part of the net revenue, cannot be used for restocking, but that the other part, BC, can be and is so used.

The balance of 1914 stock loss is recouped from 1915 net profit to the value of FHE, which thus represents the deduction under section 15 (13) from 1915 profit.

Case 5



AB = Net revenue from 1914 sales of wool, stock, &c.

ABC = Value of stock lost by drought.

P/L Account shows neither profit nor loss. Assume that net revenue AB may be used to restock by purchase, and is so used, and complete restocking is thereby attained.

As no part of the 1915 profit has been applied in extinction of the stock loss in 1914, there is no deduction under section 15 (13) from 1915 profit.

The Border Collie, His Breeding and Training.

BY JAMES L. MOORE, WESTBURY, TASMANIA.

"He romps about among the bairns,
And even there he something learns,
While mixing in their gleefu' game,
He's taught to answer to his name,
And as they scamper o'er the mead,
They teach him on a string to lead."

The intelligence of the dog tribe in general stands out predominantly, but none of the canine species has demonstrated the almost human capacity for reasoning shown by the Collie. As the result of his wondrous sagacity, fidelity, endurance, and his pliability to the will of man, he has for generations past outrivalled the keenest of his opponents when practical tests of "gathering," "leading," "wearing," "force," and "sheeding" were called for, and it is no exaggeration to state that without the assistance of these canine genii those that follow pastoral pursuits would find it impossible to care for and handle economically the huge flocks of Australia, from which is harvested our staple raw material—wool.

The home of the Border Collie is amongst the Cheviot Hills of England and Scotland. Many of the most noted dogs of the day are to be found on the English side of the borders, but the Collies of the Lammemoors, Ayrshire, Otterburn, Kingussie, and other parts of Scotland still rank high in the sheep-dog world.

As regards the genealogy of the Collie, unfortunately, early records are hard to find, as pedigrees were not valued in those days. However, records do most conclusively prove that upwards of a hundred years ago the Collie had then gained the high reputation he still retains for his ability to handle all classes of sheep kindly, without undue haste, and yet with a determination that demonstrates his masterful command.

To those who desire to take up the breeding of these fine dogs I would venture to tender the following advice:—Don't waste time and money on poor stock, but start your stud by securing the best bitch you can purchase, taking care that she comes from a family that has consistently produced high-class workers. This should be backed up by type, conformation, and above all good temper.

The laws of heredity play such an all-important part in the breeding of all high-class stock that you must make a most careful study of the pedigrees of the stock you are thinking of making, taking into consideration their general characteristics and their weaknesses and strong points at work. Having secured an intimate knowledge of your bitch, select a dog that is not widely different in character, and see that he is strong where your bitch shows weakness.

So much has been written in favour of in-breeding to obtain certain results that I feel somewhat diffident in expressing my humble opinions, but I would strongly advise the young breeder to refrain from in-breeding until such time as he is fully conversant with the guiding principles of breeding, and has acquired an intimate knowledge of the stock he is breeding from. Many of the foremost breeders of the day breed from unbroken stock. This practice I have always strongly condemned, and I find that many of the Home breeders are of the same opinion as myself—that is, that this practice must ultimately result in failure.

To be a successful breeder of any class of stock you must be prepared to learn from your own mistakes. Never allow your enthusiasm to wane, judge your own stock fairly, aim at an ideal, and never be satisfied until you have attained it. You are sure to have many disappointments, but these will be forgotten if you keep on tenaciously, and at last have the satisfaction of breeding high-class dogs, which will more than recompense you for the time, trouble, and study you have given to this great hobby.

Having bred a promising youngster, then comes the most important part of all—his care and training. For the benefit of my readers I will quote an excellent article on these subjects from the pen of one of England's foremost trainers, which will no doubt prove of great assistance to the beginner in the better understanding and training of his dark-eyed, sagacious friend, the Collie.

Having secured your puppy, feed him well, keep him in a clean, healthy condition, and allow him all the freedom possible. Should the chickens or cats get chased occasionally don't think any the worse of him. The main thing is to develop bone and muscle in readiness for the days ahead, and this can only be done by good feeding and plenty of exercise. Many a promising puppy has been spoiled, physically and mentally, by being kept chained up, his only recreation being to bark for liberty. All the time he is running about and seeing what goes on he is, to a certain extent, being educated, and at the same time gaining confidence in his own abilities.

Give him a name early, and he will soon answer to it. At about five months old teach him to lead by means of a piece of cord, in preference to a chain, as being more pliable.

Probably he has been petted a little by other members of the household. This should now cease altogether. He must only recognise one master, otherwise time spent on attempting to educate him is practically wasted.

Gain his affection by kindness, remembering always that it is by a judicious admixture of kindness and firmness that ultimate success will be assured. Do not lose patience when he makes mistakes. An excitable man always transmits the same propensity to his dog. As soon as the puppy has been taught to lead, and will follow at heel, he should be initiated into the first degree, which is to lie down when commanded. This is done by securing him with his leading cord, and pressing him down gently, but firmly, with one hand, repeating the words "lie down." A few repetitions, and he will go down by simply raising the hand and giving command. Next use a whistle to drop him, raising the hand as before, and he will soon obey the command when off the lead. When told to lie down, make him keep in that position until ordered to move. Now increase the length of cord, command him to lie down, then say "come here," and bring him

straight up to your feet; repeat this as before, until he has thoroughly mastered this lesson also.

Let him understand that you approve of his obedience, and he will instantly respond. A little coaxing is always necessary, but there must be no fondling or caressing one minute and a harsh word or cut with a stick the next.

There is no fixed age for a dog to commence work; he alone must decide that. Some are anxious to run at five months, others won't look at sheep until nine or ten months old.

A female usually starts earliest. It is a mistake to allow a puppy to commence work before it has developed a fair amount of speed. No matter how keen it may appear to be, the trainer must use his own discretion on this point. Generally speaking, at about six or seven months old they are ready, providing the inborn tendency has sufficiently developed.

Never allow him to run after another dog that is working. Have a few sheep in a small paddock if possible, gather them together with an aged or quiet dog, then when about 20 yds. distant let the youngster off, making a slight hiss through your teeth at the same time. This will not influence him any at first, but he will eventually pick it up as the signal to go, and later on it can easily be changed to the whistle for casting out.

The puppy will probably run round the sheep. Keep them together so as to avoid him breaking in, and on no account check him. Whatever kind of performance he makes let him think you approve of it.

After a few similar visits to the paddock his keenness for work will have prepared him for further lessons. These must be gradually instilled into him. First and foremost is to bring the sheep towards his trainer. Command him to lie down when directly behind the sheep, taking care to keep him lying until the sheep move on; keep in front yourself, and allow him to come on quietly, and he will soon understand his duty is to bring forward the sheep.

At this stage it requires all the patience and forbearance a trainer can muster. Don't hurry things or attempt to command too much; it may damp his ardour just when he is beginning to feel his feet. At first it is of no importance which hand he takes to circle his sheep. Let him get keen enough, then teach him to cast from either hand, taking precaution not to have the sheep too far away, so as to avoid crossing. A young dog with a naturally wide cast is to be admired, and his trainer knows he is handling one bred on the right lines. Should this propensity not be evident extra schooling is necessary when close at hand. Move the sheep quickly forward, keeping the dog at heel, and watch which way they are heading; if to the left, lie the dog a few yards to your right, bring him around behind you, and he will make a cast to head the sheep.

From whichever hand you wish him to run always bring him around behind to make a wide sweep out. A young dog can never run too wide; it is easy to bring him in closer at a later stage. As soon as he gets well beyond the sheep command him to lie down. This not only gives the sheep a chance to come away, but steadies the dog, and incidentally teaches him to "lift" in a proper manner. Fairly active sheep are most suitable to use for training a puppy.

As soon as sufficient progress has been made the trainer should teach his dog to run out when sheep are not in sight. Be absolutely sure the sheep are just over some rising ground, and after starting the dog well out run forward to watch his movements. Never disappoint him by sending him out where there are no sheep. Corporal punishment is the last resource, and then only if the dog is caught red-handed in what might ultimately become a bad habit.

In that case, after punishing him give him an opportunity to repeat the offence, and command him sternly before he can again carry out his intention if at all inclined. When punishment is necessary take your puppy by the back of the neck and shake him. This will have the desired effect, and is much preferable to using a stick or whip.

Refrain from shouting or whistling loudly to your dog when close at hand, as this will tend to spoil him for com-

manding in the distance. Strict discipline is the first plank in training, but it should be so instilled that there is complete understanding between man and dog. Study your puppy's temperament; a strong tempered dog will need much firmer handling than a quiet, even-tempered one. But whatever his nature, if he is of the right working strain, and trained patiently and carefully on these lines, I feel sure he will be both a credit and a pleasure to his owner.

In regard to training for sheep dog trials, some trainers are great on thrashing obedience into a dog, and will put him "through his paces" before taking him near the sheep. On a small trial ground, where the dog is practically under his master's stick the whole time, he may put up a successful run, but from experience in all classes of sheep dog trials I am confident that such a dog would not have the chance of a "snowball in Hades" if competing on a large trial ground, where the run out is over half a mile on the slope of a hill, and he had to carefully guide his sheep through various obstacles on the return journey. For a man to successfully handle a dog in the distance, and in fact to get the best results at all times, there must be complete confidence between them.

No cringing fear on the part of the dog, but an affectionate obedience, an anxiety to do just what his master commands, and each whistle or sign instantly obeyed. And when thrown on his own initiative, as must happen when the sheep to be brought are out of his master's sight, he will use that marvellous and almost human intelligence inherited from a long line of working ancestors, and brought out and perfected by skilful training.

Shorthorn Types.

(Continued.)

We published last month some interesting sketches with comments thereon of varying types of Shorthorn heads by Frank D. Tomson, in "The Shorthorn in America." In this issue the article is concluded with sketches illustrating bodily conformation.

Figure VIII. shows the body outline of a Shorthorn cow approaching the ideal. Note the levelness of the back, the well-rounded, well-set quarters, the depth of body throughout and the large, well-formed udder. Combine a body like this and the head in Figure VII. (last issue) and little is left to be desired in the making of a Shorthorn matron. With an outline such as this, one usually finds a well-distributed and liberal flesh covering: the shoulders are usually well laid, and the hips well covered. Note the graceful set of the tail-head. One thing to keep in mind in the selection of a brood cow or herd bull is ample depth of body, such as is illustrated in Figure VIII.



Fig. VIII.

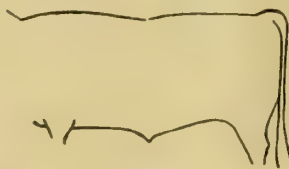


Fig. IX.

Figure IX. shows a bad top line. The neck does not join smoothly to the shoulder, and there is an unsightly break in the back, and the tail-head is rough and high. These are three faults that the beef buyer at the markets objects to, and cuts the price in harmony with his prejudice against them. The overwhelming majority of beef animals sold at the markets (in U.S.A.) are inspected and purchased by men on horseback, and these defects along the top line as shown in Figure IX. are quickly discernible, and establish a bad impression with the purchaser. It should be remembered, too, that the highest priced cuts are found along the upper one-third of the carcass, and defects appearing in

that region are the more objectionable and costly on that account.

Figure X. shows a similar top line, and in addition both the front and rear flanks are cut too high, and the quarter is spare—"cat hammed." There is not a feature shown in this outline that appeals to the favour of anyone familiar with correct bovine form.



Fig. X.

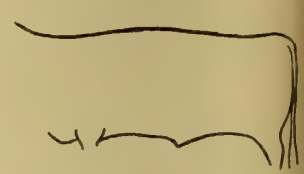


Fig. XI.

Figure XI. shows the top line inclined to bow up too much, and the tail-head is also a trifle high. As a rule, when the top line is "humped," as in this case, the under line is apt to show a similar tendency. The appearance is not pleasing, and it is advisable in the selection of breeding animals to avoid this peculiarity.

Figure XII. approaches the ideal conformation for the Shorthorn bull. Note that the top and bottom lines run level; that the quarters are well proportioned and properly set; that the tail-head is perfect, and that the neck joins the body in pleasing lines. Contrast this outline with the several that have preceded it, showing defects.



Fig. XII.



Fig. XIII.

Figure XIII. shows a view looking downward over the backs. The one shows uneven side lines with flat fore-ribs as indicated by the in-curves back of the shoulders. Note, too, the tendency to narrowness at the rump. The other shows the straight side lines, and ample thickness of the perfect beef carcass. Note the width back of the hips.

Figure XIV. shows the difference in conformation of the hind leg. Note that one is badly crooked, furnishing an inadequate support to an animal when it acquires any considerable weight. The one shown in the centre approaches the correct position—not too crooked nor too straight, but



Fig. XIV.

designed to furnish the best support, and stand the necessary travel. The one at the right is entirely too straight and interferes with the proper movement when in action. The tendency of an animal of this conformation when it becomes heavy is to buckle forward.

The above few suggestions by no means cover the ground fully, but they draw attention to a few fundamental characteristics that everyone interested in live stock improvement must understand. It is a good practice to make comparisons of animals wherever found. When looking through a herd take time to note the difference in conformation. It is always an interesting study, and a profitable one if you have money invested in the business.

Cure for Footrot.

Arsenic v. Bluestone.

New Zealand correspondent stated through our columns last month, in reference to a cure for footrot, that the experience of himself and other farmers had been, that while treatment recommended in the December issue of *The Review* had been found beneficial, bluestone was not a real cure for the trouble.

He said:—"The only thoroughly effective cure we have found is an arsenical preparation manufactured and sold in New Zealand, which, in addition to arsenic solution, I believe contains carbolic and other things. I have used this stuff for the past few years, and have found it certain in its effects, even in the very worst cases requiring to be run through the footrot trough a second time, three days after the first immersion. But the footrot trough needs to be a sufficient depth to allow the sheep's feet to thoroughly soften in the solution, one minute's immersion being required.

This stuff is cheap and economical to use, two gallons of being sufficient to keep our 3000 sheep clear of the disease during the year, it being mixed at a strength 100 to 1. There is another very big advantage with this stuff, and that is that a lot of paring work is saved. I recently experimented in this direction with a mob of 200 odd sheep which had allowed to get very bad indeed; in fact, a goodly number of them could hardly walk. We put them through the footrot trough without paring at all, twice on the one day, and then again three days after, on the third day. At the end of the week they were nearly all free of limp, and now every one of them is as sound again."

In view of the above we wrote to a number of men who had experience of the trouble, and herewith append some of the replies.

The manager of the big Metropolitan Farm at Werribee, Victoria, says:—"Our method of treatment has been on the lines laid down in your article. We have tried both bluestone and arsenic, but have found the bluestone the most effective. On account of having to water our country during the winter months, the conditions here are different to the general sheep-ranger, who generally has dry paddocks in which to put sheep after being treated."

Mr. H. W. Ham, of Lara, Vic., takes a somewhat different view. He writes:—"This opens up a controversial matter. Present-day learning, I think, will be mainly in favour of arsenic at varying strengths, from $\frac{1}{2}$ -oz. to the gallon for real scald, to much stronger for real black footrot. Bluestone is quite effective also for scald, especially when suitable conditions follow. I have notes from several who advocate it, and use it at from 1 to 2 ozs. to the gallon on plain country, not really classed as footrot country, where they get footrot only occasionally, in very wet winters and springs. I have also notes of where it has been used at 1 lb. to the gallon for black footrot, on soapy, black soil, hill country."

The equivalent in arsenic seems to be about 3 to 4 ozs. to the gallon. Yet others say they find this strength too drastic either bluestone or arsenic, and experience seems to prove that, like dipping badly infested sheep, better results all round will be gained by using according to directions, or moderate strengths, and putting the worst through twice or more, at proper intervals, than by increasing the strength seriously. On large holdings this is not always advisable, for while there are several objections to too great a strength, it may be a more losing game from a management point of view to drag sheep about for treatment at lesser intervals.

Bluestone and arsenic are very suitable for trough work. They are the most searching where careful paring is not possible,

and it mostly isn't on large holdings. Lime paste, and carbolic and phenolic preparations are more turbid. Yet if the sheep can be left long enough in the race standing in the trough, then a larger proportion merely affected with scald need no paring. Even in severe cases of black rot, after the maggots have done their work of freeing the wall of the foot completely, the solution can get to it effectively. But there will be cases where the sole is beginning to lift, and others where streaks run up under the shell, in which paring will be absolutely necessary. Again such a lot depends on conditions immediately following treatment, whether put back on to soil conducive to it, and whether damp conditions follow instead of dry. One can scarcely discuss the merits of any dressing unless stipulating similar conditions to follow. The ideal is to dry on battens, then immediately on to stony or gritty dry land, or dry hard fallow.

"A spongy boned, ugly hoofed sheep, with black foot rot of long standing, is most difficult indeed to cure, impossible in one application of any known cure. White hoofed breeds seem more disposed than black. In stud flocks much can be done towards prevention by using the secateurs and knife before footrot develops at all, by keeping ugly, overgrown hoofs in proper growing shape. There is a preparation just recently on the market in Melbourne which may be found similar to the New Zealand cure mentioned by Mr. Hume. It can be used as low as 100 to 1 for scald. It was as effective as anything I have ever used for bad footrot, sheep from one paddock of silt along the Broken River, owned by the Dookie Agricultural College, being particularly bad in the spring and summer of 1918-19.

"Unslaked lime, where it can be procured fresh, for hand treating obstinate cases, is one of the best. Pare the feet carefully, mix to a paste, and place the feet in while hot. In some notes from 1890 I find one from Glencoe, S.A., from Mr. John Laird, where he used carbolic acid in varying strengths for the trough and for hand treating. The object of all treatment is to dry, but it needs following up by dry conditions of soil afterwards.

"The following are the main ingredients mostly in use:—Arsenic, bluestone, new lime, powder dips, phenyle dips for trough work (separately, and some mixed), carbolic acid, spirits of salts, &c., for hand treatment of worst cases."

Mr. Fras. Evelyn Place, of the Roseworthy Agricultural College, S.A., says:—"Bluestone is generally acknowledged all the world over as an efficient treatment for footrot in sheep, either alone or in combination with other drugs such as tar. The climate of N.Z. is no wetter than Scotland or Devon, and it should be equally effective there as in the other countries. Arsenical pastes are effective also, but in unskilled hands their application may lead to severe caustic effects. Whatever preparation is used, it is advisable, as Mr. Hume remarks, to give the feet a sufficient time to allow of the dressing 'getting home.'"

The manager of Warrah Station, Willow Tree, N.S.W., does not regard bluestone as an actual cure. He says:—"I have read Mr. Hume's letter with interest. My experience has been that bluestone is not a cure for footrot. If the feet are carefully pared before it is applied, it is beneficial, but is not a cure. A mixture of bluestone and arsenic, although giving good results, cannot, I think, be looked upon as an actual cure if the sheep are badly affected. I have had no experience with the specific recommended by Mr. Hume. From what he writes, it must have given most satisfactory results, more particularly as the feet had not been trimmed."

Mr. L. J. Fitz-Patrick, Aberbaldie, Walcha, N.S.W., gives the following sound advice:—"Personally I have not had very much experience treating this very disagreeable and serious disease. During recent years the climate of New England has become quite a 'dry climate.' Certainly there has not been sufficient rain to so sodden the soil that the footrot germ could gain much headway. However, I consider there is only one specific to use where treating infected sheep, and that is arsenic. But before the arsenical solution is used the sheep should first be run through a trough containing say six inches of the ordinary bluestone solution. After they have had their hoofs pared and well soaked in this liquid, they should be allowed to rest in a small paddock for a few days,

and then again they should be run through the trough. After repeating this treatment a few times, finally put them through the trough for the third time, having changed the bluestone solution for one containing a liquid arsenical dip of about double the strength of that used for dipping. If the sheep are then depastured in a sound, dry paddock they should get well. But, of course, they require future mustering for inspection."

Mr. E. M. Garsia, Irishtown, Tas., says:—"Re footrot cure. I cannot believe that bad cases can be cured without paring. My experience before I used the Romney was that paring, properly done, is essential, and there is not much difference in the different standard cures. I prefer a caustic like bluestone, with lard, applied to the pared foot with a toothbrush to a foot bath."

Messrs. Browne Bros., Memagong, Young, N.S.W., write:—"We have not previously heard of the preparation made in New Zealand, and referred to by your contributor. If it will cure without carefully paring away the diseased hoof, it is far before anything we have tried. We have kept sheep on their feet by running them through arsenic and bluestone mixtures in troughs, but in the majority of cases to effect a cure have had to pare carefully. Have had good results from about one dessertspoonful of carbolic crystals dissolved in a pint of kerosene used in dry weather, but would not recommend that application without careful paring."

Mr. Thomas J. Gorman, Plentyana, Corowa, New South Wales, says:—"Regarding bluestone as an effective cure for footrot, I have given it up. Footrot has driven the Merino sheep off a great extent of this Murray Valley country. A big battle was put up by sheepowners before the Merino sheep had to go. A combination of bluestone and arsenic was very much used, and arsenic by itself when the wool lengthened, as the bluestone stained the wool badly. Sheepowners in the Corowa district of Riverina now favour a fine crossbred sheep (as fine as they dare, according to their land) as not being so liable to footrot as Merino. The fault with bluestone as a cure was that it hardened and contracted the hoofs, which latter prevented them healing between."

Mr. C. E. Prell, Gundowringa, Crookwell, N.S.W., sends the following interesting reply, which contains a very useful tip:—"I have not had any experience in this disease, but some time ago I visited country where footrot was bad, and saw a method of dealing with it which struck me as decidedly good. In every paddock, as is usual, there was a small salt lick house; this stood on a hard concrete floor of about 14 ft. x 10 ft., with a raised edge of concrete all round of about 5 in. The footrot mixture was put into this to about 2 in. deep, and was kept at that level with a ball tap and small tank full of the mixture. This was periodically cleaned by just sweeping the concrete bath out. Sheep usually go every day to the salt lick, and stand about the trough licking, and while so doing their hoofs get well soaked. It is, of course, only necessary to use this at footrot time."

Mr. C. K. Hanson, manager of Wallandool Station, Henty, N.S.W., writes:—"It would appear that Mr. Hume having, as he says, a thoroughly effective cure in the arsenical preparation, there must surely be some constituent either in the land or the moisture on his property that makes the arsenical preparation preferable to bluestone. My experience, however, is that there can be no treatment as good as the bluestone in its entirety, as per your article of 16th December, 1920. I have treated and cured sheep by the method that it would be impossible to find in a worse state with the disease; but it would be out of the question to do the work thoroughly without paring in all cases, and it is hard to imagine that any practical amount of immersion or soaking of the sheep's feet whilst going through the trough could have the effect of so softening the hoof as to do away with all paring, considering that when "paring and trimming," prior to running through the trough, in many cases the operation needs a jolly good pair of secateurs to do the work when a knife won't. After all is said and done, careful paring and trimming is the main thing. I do not think it possible that any treatment would be beneficial unless the whole of the diseased hoofs were first carefully cut away."

Motor Trip to Central Australia.

(Continued.)

PART III.

About thirty miles up the Finke, above Crown Point Homestead, the track goes down into the sand bed of the river, and follows along the bed on the south side for a few hundred yards past Yellow Cliff. This proved to be one of our toughest tests for the Dodge car. Mr. Pearce had sent a pair of horses to give us a pull through if necessary, but as we were an hour or two ahead of them we decided to have a shot at the crossing on our own, and after about an hour's heavy work carrying the bulk of the kit, and all four of the party shoving in the deepest pinches, the first gear got us through.

However, it was hot work, as the day was the hottest of the trip, the sun as warm as December down south, and a strong north wind giving us our first and only experience of a Central Australian duststorm. Our want of experience with the river sand beds made this crossing far more strenuous than necessary. We followed the heaviest tracks, and in consequence in places had the loose sand half way up to our hubs. On our return past the same spot we obtained the services of two black boy guides, and they took us over the centre of the bed on much firmer sand, where the car got through comfortably without any unloading. But that duststorm we are not likely to forget.

A mile or two above Yellow Cliff is the former site of the Crown Point Homestead, and where a store and change for the camel mail are situated.

The store is only 50 yards off the track, but so thick was the dust that at first we went right past without seeing it, though on the look-out for it all the time. A let-up in the wind and dust, however, fortunately occurred after we had passed, and we harked back to leave letters.

We found the store (like the "Do-Drop-in," over 150 miles back) kept by a "hatter," whose boast was that he had never ridden in a train in his life of some 70 years.

At the store the track, which following up the Finke from Crown Point Homestead had been running generally north-west, again turned due north, and some three or four miles further on the Finke was crossed over a fairly good crossing of about a quarter of a mile, under the shadow of Crown Point, the flat-topped, crown-shaped hill that the run is named from.

Crown Point, however, is dwarfed a mile further on by the first great cliff of the Finke, lying on the north-eastern bank, and known locally as One Tree Hill. On its western face it is a magnificent, almost perpendicular cliff of some hundreds of feet in height, cut from summit to base by the action of the river in ages past. The colouring of its ochres, sandstones and clays, from light silver grey through duns, buffs, yellows, orange, to scarlet and vermillion, is wonderfully grand and picturesque. Only the Engoordina Cliff, just north of Horse Shoe Bend, 25 miles further north, is in the same class for grandeur and colourisation. From what we saw on the middle section of the river, certainly no other river in Australia can compare with the Finke in its cliff grandeur. These great cliffs and deep sand beds speak aloud from bygone ages of the volume and greatness of the river in its zenith, when The Centre was practically a tropical country, and the stream equal to three or four Murrays in width and depth.

The depth of the sand bed is extraordinary, for sinking for water in a dry spell on Crown Point, 90 feet of solid river sand was gone through before the old rock bottom of the channel was struck. This gives a nice problem for scientists to work out, how many centuries or thousands of centuries it has taken to fill that channel with 90 ft. of wash sand.

About eight or nine miles north of One Tree Hill the boundary between Crown Point and Horse Shoe Bend Stations is crossed, the latter the property of Messrs. Sargeant and Elliott. Just about the boundary line, along the creek bed, big pie melons were growing in hundreds, this after a long drought. To-day, after the best six months of

almost continuous rains ever known, they must be a riot of abundance.

Once well on to Sargeant and Elliott's run there was evidence that the seasons lately passed through, though dry, had not been so terribly hard as those experienced from Crown Point south to the Peake.

Some twenty-five miles from the Finke crossing, after a gradual ascent nearly all the way on to elevated steppes, or as locally termed, tablelands, the Horse Shoe Bend Homestead and next crossing of the Finke, some hundreds of feet below, were suddenly sighted. The descent of the track here winds short and sharp, down what is practically a cliff of the river, to the homestead, which is almost a small village, comprising the homes of the two partners, hotel, store, blacksmith's shop, various outbuildings, blacks' whurleys, and stockyards, and is most picturesquely situated on a small terrace about 50 ft. above the river bed, at the foot of rainbow-coloured cliffs beetling up hundreds of feet above, and broken by canyons branching off in all directions.

Mr. and Mrs. Elliott, who conduct the hotel and store, while Mr. Sargeant manages the run, looked after us well, and it was a luxury to get a cold shower and sit down afterwards to a monster joint of good roast beef and vegetables ad lib., for we were all hot, dirty, dusty and hungry after the duststorm and strenuous work at the Yellow Rock crossing. Close to the river bank there is another fine well here, with an ample supply of excellent water, which is laid on to the homestead, and irrigates the vegetable garden all the year round.

That the horses in The Centre can buck with variety and vitality, we had an illustration here. Mr. Sargeant was just getting his equipment together for a bullock muster, and the horses for that purpose, which were a very fine lot as regards upstanding, strength, and bone, were either in the yard or tied up to same, with the packs already on for starting out, when our mechanic, who had been overhauling the engine, started her up suddenly. Then the circus began. Every horse outside the yard broke away, and the pack horses, which were young and new to the game, all started bucking for all they were worth, to get rid of their loads. Two especially were artists, and bucked in every conceivable direction and position, even when right down in the heavy river sand, for many minutes, till they burst their cinches and slung their loads. Such a circus our party did not at all relish being the unwitting cause of, as at one time it looked a guinea to a gooseberry on the general smashing up of Mr. Sargeant's packs and contents, but when all were collected it was found that all the damage was a few broken straps.

Next morning, which was beautifully fresh, cool, and cloudy, with a delicious south wind, our first touch of the Trades, Mr. Elliott yoked up eight draught, two pack, and two riding donkeys, and sent them along with us in charge of Erldunda Bob, a rather reticent old abo. (with a beard to his waist), but a good donkeyman, with "Changeie," a youngster of about 16, as an offside. This equipment was absolutely necessary to get over the famous Depot sand hills, which start some three miles from the homestead. But first the river is again crossed twice, the two crossings which bound the Horse Shoe Bend the station is named after being about a mile and a-half apart. Between these two crossings, on the east or outer bank, is the great Engoordina Cliff, one of the sights of The Centre, and even surpassing One Tree Hill in colourisation and grandeur. For the first or lower 60 to 80 ft. it is bright red or crimson, merging to vermilion, then heliotrope merging into chrome-white, then higher up lemon yellows, topped with bright orange. In some lights this cliff is simply gorgeous with colour, and its grandeur has to be seen to be appreciated.

The Depot sand hills, which cross the track in a series of waves for some eleven miles, running from north-west to south-east, have been the bugbear of the traveller through The Centre ever since that country was first explored.

They consist of the finest sand imaginable, in fact of the consistency of flour, and crimson red in colour. We heard them described before reaching them, as "as red as a fox," but the reddest fox that was ever whelped was never in it for colour with the sand of these hills. In the eleven miles

there are 26 sand hills, the valleys between averaging from a quarter to half a mile in width, and though sandy, are fairly firm going, over which our Dodge could run on third or top gear, but the car has not been made that could negotiate the tops or ridges of the steepest hills on any gear, for there the fine sand is so loose that a car simply settles down almost to her hubs.

The donkeys, however, proved themselves the ideal draught animal for such work, as they go into the collar so steadily and all together, that there was no jerking or straining of the car in the least. With horses under such circumstances there would be a very great risk of breakages to harness, gear, and car.

It took over seven hours to do these eleven miles, as the donkeys stuck religiously to the one solid gait of about 1½ miles per hour, whether down to their knees over a loose, steep pinch, or on the comparatively firm, flat ground of the valleys.

The sand hills rise gradually from the south up quite a gentle slope to a height of up to about 50 ft., and then in many cases break off suddenly with a steep drop on the northern side, this making the negotiation of them an easier business travelling north than going south. However, on our return we only used the donkeys over sixteen hills, compared with twenty-four going up, but returning we were "flying light" in comparison, and in addition had gained in the interim considerable experience of sandy tracks, and how best to take them.

Some of the flora of this sand hill belt is very interesting to the southerner. Porcupine bush (often misnamed spinifex) is the principal vegetation, being spread more or less throughout. The desert oak (the first we had sighted) is in every valley, and some valleys had quite a park-like effect therefrom. This is undoubtedly the most graceful of all the Casuarina family, and some of the trees, about 40 ft. in height, were very beautiful in their weeping effect. This timber is highly prized in The Centre, when not too old, for building purposes, and would make an excellent cabinet wood.

A silver-barked acacia or wattle was new to us. This shrub runs from 12 to 20 ft. in height, and is unique in that the trunk and limbs are covered with a light silvery substance or coating like whitewash, which rubs off with handling, the bark then being of a light greenish yellow. The foliage is sparse, like narrow yarran leaves, and the blossoms also sparse, like thin black wattle just breaking into yellow bloom. There was another shrub, also new to us, from 8 to 10 ft. high, with a rough bark and a foliage somewhat resembling fennel, but giving out a most terribly nauseating smell when broken.

The most interesting plant, however, in these sand hills is what, for want of a better name, is called heather, and which some little distance off looks remarkably like the native heather of the Victorian heath coast country. The flowers are in clusters, and each little flower, which in size is no bigger than a small pea, is star-like in shape, with five white pink petals round a red puce centre. The foliage (if such can be called foliage) though is very extraordinary, for ¼ to ½ an inch from each cluster of flowers a green metallic shiny substance adheres to the stalks, and below this gives way to a whitish substance resembling gum and sand mixed.

Just over the last sand hill is the Depot Well, close to the bank of the Hugh River, which, coming in from the McDonnells from the due north, junctions with the Finke a few miles north-west of Horse Shoe Bend. This well is on the brackish side, and so is, nowadays, not often used, but it was the only well that we struck on the whole trip not absolutely fresh.

By the time we reached the well it was nearly dark, and after spelling for tea, we went on again, and with the aid of the donkeys, crossing the Hugh eight times in the next eleven miles, reached Alice Well Police Station, exactly 100 miles south of the McDonnells, at 2 a.m. The night, though calm and beautifully clear starlight, had been bitterly cold since 10 o'clock, and it was an agreeable surprise to be met and welcomed at such an hour by Constable Sherman in charge, with bowls of steaming hot soup.

(To be Continued.)

Letters to the Editor.

Sheep Health and the Blowfly.

To the Editor.

Sir,—With reference to Mr. Linton's letter in your February issue, the sheep I referred to were undoubtedly fevered before being seriously blown, owing to the diseased state of their livers and kidneys, and the condition of their blood. The fact that fever attracts the fly is well known to the medical profession. During the African War doctors could at once detect an enteric case from the swarms of flies hovering over the patient.

When maggots work into the bone of freshly marked lambs' tails it is an infallible sign that the wound is septic, through marking in dirty yards, or by the use of unsterilised instruments. The dressing used to kill the maggots may also destroy the invading disease germ, otherwise the death of the lamb is certain. In the case of tetanus, the treatment will generally prove to be too late.

When Mr. Linton put his sprayed ewes back in the same paddock, the feed was probably ripening all the time and drying off, and this change in the condition of their diet would no doubt benefit his ewes. Those he put into small paddocks for observation, however, seem to have given the best result. If he had adopted that system in the first instance, and so prevented his sheep from becoming overgorged, I maintain he would have had no trouble with the flies.

Anyone who wants to jet sheep should do so before they actually show attraction to the fly. I do not for a moment suggest that dip kills sheep, but when they become diseased, and consequently blown, they are not in a fit state to stand the operation.

I do not think that we get special waves of blowflies—there are always enough about to blow all the sheep in the country. But we get waves of feed, and when that happens, if pastoralists would only confine their flocks on small paddocks, and so prevent them from suffering from the serious effects of over-eating, there would be less heard about the blowfly's depredations.

But to keep sheep in a perfect state of health they must have an ample supply of salt, combined with a proper proportion of the other chemical constituents contained in healthy blood.

After all, the analysis of healthy blood is practically the same as that of pure sea water.—I am, Yours, &c.,

S. L. REID.

Carossa, Moree, N.S.W., February 25, 1921.

When saddle cloths on blankets get blown it is a sign they need cleansing. New blankets may be blown owing to the warps having been treated with sour dressing. I have seen jute goods blown, but only when the warps had been treated with putrid fish oil. Paraffin oil is now used for this purpose.—S.L.R.

Sheep's Health and the Blowfly.

To the Editor.

Sir,—In a recent issue you published a letter to the effect that sheep that have plenty of salt are not susceptible to attack from fly. This bears out something I have been practising here for the last three years with great success. I give my sheep a free supply of coarse salt, impregnated with Quibell's "Kerol," a half-pint to 40 lbs. This keeps fluke in check, and has eradicated "Braxy," and is a fine prophylactic for worms. Finally, I haven't seen a case of fly in two years.—I am, Sir, &c.,

ROBERT W. LEGGE.

Cullenswood, Tas., 7th March, 1921.

Belgian Hares in Patagonia.

To the Editor.

Sir,—Being a subscriber for many years to your excellent paper, I write to ask if you would be good enough to assist me by giving all information possible regarding the destruction of wild Belgian hares, which threaten to become a pest in this country.

These hares were turned down on the western border of Chile and Argentina some eleven years ago, on soft grassed land, with patches of forest, and considerable rainfall. They are working their way down the valleys to the eastward, being found on the pampas, which are very dry, with occasional severe winters, snow and frost, very little rain, hard and shelterless, with exception of small bushes.

This is solely a sheep, cattle, and horse raising country. The fox and skunk, which are indigenous, and might have kept the hares in check, have been practically exterminated. Do you know of any disease with which these hares could be infected without detrimental effects on existing stock and sheep dogs? Also of any natural enemy which would not attack sheep or lambs.

May I say how much we appreciate "The Pastoral Review," especially "Sporting Notes." My compliments to "Fife and Drum." We keep a great number of horses in this country. I have had four Australians, at different times, working for me, who held land in Cosme (New Australia, Paraguay), and have no doubt you would willingly make up another shipment. With apologies for troubling you.—I am, Sir, &c.,

A.B.C.

South Patagonia, 7th November, 1920.

Mr. W. E. Abbott, of Wingen, N.S.W., who is an authority on natural enemies and natural diseases, replies to the above letter as follows:—

"I have received copy of your South Patagonian correspondent's letter re wild Belgian hares, which are spreading in his country, and threatening to become a serious pest. I do not know Belgian hares as a species, but the common brown English hare brought into Australia, and spread over the whole Commonwealth in the last thirty or forty years, has never, as far as I know, been a very serious pest for any length of time anywhere in Australia. They always seem to become scarce or disappear as the wild brown rabbits, which began to be a pest about the same time, begin to invade their territory. The only feasible explanation of this that I have ever heard, is that the buck rabbits kill the young hares on their open nests, as they do their own young under certain circumstances.

"The only man in Australasia who has cultivated and used natural diseases for the destruction of the rabbit pest is Mr. Coleman Phillips, of Carterton, New Zealand, and he keeps his secret to himself. If the wild brown Belgian hare described by your Patagonian correspondent is really the wild brown rabbit of Europe, then I should say Patagonia is in for something serious, as the climate and condition described are just suitable for the rabbit pest, and the experiences of Australia are likely to be repeated there.

About thirty years back, when the rabbit pest first became serious in New South Wales, Mr. Coleman Phillips came over to Sydney from New Zealand, bringing with him some tubes containing the germs of the disease which he had cultivated and used on his New Zealand run, and also some inoculated rabbits in crates, and made an offer to the New South Wales Government to clear the rabbits out of this State at his own cost if the then Government would give him the necessary legislative authority, and pay him £25,000 when the Government was satisfied that his contract was completely carried out. That was the first occasion on which I met Mr. Phillips. He did not, as far as I remember, propose to sell his secret method.

"At that time New South Wales was carrying over 62,000,000 sheep on runs in the main poorly watered, and the whole of the State was not stocked. There were no artesian bores, except a few experimental ones here and there. The New South Wales Government turned Mr. Phillips' offer down with a slump, seized his tubes, crates, and rabbits, and

burned them in the boiler of the steamer in which he came over.

"Since then no effort to meet the pest with cultivated diseases has been made in Australia. The pest has spread all over the State, and as it spread the number of sheep carried in New South Wales has steadily diminished from 62,000,000 to less than 30,000,000, and I think the heavy losses of the last three years were largely due to rabbits—the eating out of the best grasses and shrubs by them. Since New South Wales, in the early nineties of last century, carried 62,000,000 sheep, up to the present time more than £100,000,000 has been spent in pastoral improvements, artesian bores, tanks, stock carrying railways, rabbit poisoning, &c., and the result is a reduction of stock carrying capacity to less than 30,000,000, with every prospect of further reduction.

"Professor Danysz, of the Pasteur Institute, who some years later proposed to deal with the pest by the introduction of chicken cholera, and was brought out by some New South Wales pastoralists, was forbidden from testing his theory on any run in the State, and the Commonwealth Government has consistently refused for the last twenty years to allow any foreign disease or natural enemy to be introduced into Australia."

Suffolks at Smithfield Show, 1920.

To the Editor.

Sir.—The published statistics of the Smithfield Club Show 1920 are now available, and it is interesting to note that Suffolks again well held their own, in spite of the fact that some of the most famous flocks were debarred from showing, owing to foot and mouth disease restrictions.

The following facts are outstanding:—(a) In the live section of the show the heaviest Suffolk lambs weighed 5 cwt. 3 qrs. 10 lbs. (the pen of three), and this was heavier than any other pen of lambs in the show, heavier even than the wethers of any short-woolled breed except one, and 59 lbs. heavier than the champion pen, which were wethers; (b) the percentage of dressed carcass to live weight of the Suffolk lambs in the carcass section was 84.1: this was not exceeded by any other breed; (c) in the cross-bred carcass classes Suffolk crosses won six out of the eight wards. The curious thing seems that they were not placed higher in the purebred classes, when "the primary aim of the Club is to encourage the selection and breeding of the best and most useful animals for the production of meat, and to test their capabilities in respect of early maturity." The champion carcass (a lamb) yielded 57.14 per cent. of dressed carcass, while the Suffolk lamb, placed fourth, yielded 61.69 per cent., and the whole six Suffolk lambs exhibited averaged 58.41 per cent.—I am, Sir, &c.,

E. H. PRENTICE.

Secretary Suffolk Sheep Society.

Ipswich, Eng., 6th January, 1921.

State-owned v. Private Railways.

To the Editor.

Sir,—I read with much interest a letter on this subject, signed Wm. Smith, in your last issue. Just underneath it was a letter from "ex-Digger," entitled "Centralisation and stagnation." Now, I think both of these writers should be read together, as if the map of New South Wales is examined, it will be found that the railways have all been constructed with the express purpose of centralisation, not with any intention of opening up the country for settlement, unless such country so opened up sent its products to Sydney.

I have been in the north and north-west of New South Wales since about 1884, and have travelled over a great part of that locality, consequently my observations may be of use.

First, at times the railway system north of Singleton is not connected to any port. I was marooned at Singleton for three days a few years ago owing to heavy floods. To get over this difficulty I have for many years been surprised that no railway was constructed from Werris Creek to Mudgee orunedoo, as besides opening up a fine line of country it would give people living west of Sydney who might want to go to the north a quick route. The same applies to travelling stock during drought time.

Another link should be from Narrabri to some point on the western line. The same remarks are applicable to this connection being made. Another line should be constructed into

Port Stephens to relieve the congestion round Sydney. And in this connection "ex-Digger's" letter hits the nail right on the head. Have smaller States, do away with State Parliaments, and sell all the railways to private companies, who would look out that they were properly managed. In Queensland we have railways evidently constructed originally to open up the back country, and considering the population and length of time this part of Australia has been opened up the railways here, from a purely colonising view, compare favourably with other States, as even if it is narrow gauge, we have 5600 miles—nearly 700 miles more than New South Wales—and if the existing lines are linked up I think we have a big start as compared to the mother State, always provided that Queensland is divided into not less than four States, as there are five ports, one of which, Gladstone, only wants development to rival Sydney.

What is required is patriotism, not political control, as the railways of Australia ever since I can remember have always been used as vote catchers at election time. If a small body of men, composed, say, of a representative of Federal power, a railway engineer, an accountant, and four others, preferably primary producers, who could make practical suggestions, were appointed to lay out a comprehensive scheme, then possibly we might have development work which at the same time would be useful in the event of war, as shifting stock and troops have points of similarity.—I am, Sir, &c.,

F. B. STARKY.

Rainworth, Springsure, Q., 4th March, 1921.

Stock Restrictions on the Queensland Border.

During the month the question of the restrictions placed by the Queensland Government on the export of stock across the border into New South Wales when Mr. Ryan was Premier of the northern State, has again come before the High Court in the case of McArthur and Co. v. State of Queensland.

The validity and force of section 92 of the Constitution was upheld by the High Court in its judgment on the pig case (Foggitt, Jones and Co. v. New South Wales), but in the Duncan case, in which the Queensland Government defended its right to seize cattle coming into New South Wales for sale, under the powers acquired by them under the Meat Supply for Imperial War Act, the High Court supported the Government, and the Privy Council on appeal affirmed the validity of the Meat Supply Act, thereby confirming the Government's action in seizing the cattle. Now, however, the High Court has reconsidered its previous decision, and the remarks made by the Honourable the Chief Justice (Sir Adrian Knox) in his judgment are interesting to any stock owners in Queensland whose practice is to sent stock for sale in New South Wales markets. He said:—

"The prohibition by a State legislature of interstate sales of commodities, either absolutely or subject to conditions imposed by State law, is, in my opinion, a direct contravention of section 92 of the Constitution, and the freedom guaranteed by that section is so fundamental a provision of the Constitution that it is not permissible for a majority of a full bench of this court in full agreement as to constitutional principle and interpretation to follow the decision in Duncan's case, if, in their opinion, it is wrong in law. Especially is that so in this instance in view of the previous decision of this court in Foggitt, Jones."

Further on the Chief Justice says:—

"Is the Commonwealth bound by section 92? The present case has involved a closer examination of this question than any previous occasion upon which the court has considered it. The result has been to convince us, notwithstanding dicta in previous cases, that the true office of section 92 is to protect interstate trade against State interference, and not to affect the legislative power of the Commonwealth. These provisions ensure that border duties or other pecuniary imposts or encouragements or any legislative contrivances tending to destroy the commercial equality of opportunity between the States are forbidden so far as the Commonwealth Parliament is concerned."

The wording of section 92 is perfectly clear, and leaves no doubt in the mind as to the intention of the Constitution that trade between States should be absolutely free and unfettered, and it is to be hoped that the present judgment will put an end to any attempts at restrictions or prohibitions for the future.

Motor Notes.

BY "GNOME."

The Motor Lorry for Transportation.

During the last month one or two occurrences have given me food for serious thought. At the "special request"—as the music-hall signs say—of a friend of mine, a visit was made to the recent motor show wholly and solely to make a close and thorough inspection of the motor lorry section. It was then that suddenly one found himself confronted with what appeared to be a small but yet a real breach in a great huge wall.

My imagination was at its pranks again, and I found it very hard to come back to earth with what stood around me in the shape of some of the finest motor lorries in the world. These—the lorries—were the tiny breach in the wall, the latter consisting of that vast continent of ours—Australia.

Just take up a good map of the Commonwealth and look at it. One of the most impressive features to be found will be the faint lines of railways that radiate in some instances far out into wildernesses that at the very best of times would not keep a Will o' the Wisp alive, whilst again vast stretches of sparsely populated, though naturally wealthy country, are left absolutely untouched. And when one considers the present financial condition of the country, and then goes into the cost of building railways, the possibilities of building lines for territory that is in dire need of same, to say the very least, appears remote. Your member of Parliament may manage it, as these "events" are sometimes arranged, but such an achievement is not going to help the financial position in any way, is it? Up to the present the part played by the motor car in the opening up of new country has been a very big factor. No matter at what train terminus you may halt throughout the country, you may count on it for almost certain that you will find a mail and passenger carrying car service that radiates in all directions throughout that particular district.

Well, if the motor car be used as a supplementary aid to the railways from the passenger and mail carrying viewpoint, what better avenue then is left over than the motor lorry or tractor as the conveyor of goods to the rail-head? Take the lorry or "motor truck" in the United States for instance. These vehicles are used extensively even in thickly populated districts, where the "rail-road" engineers consider it too expensive to lay down a track. And over there they realise already that the truck not only greatly adds to the introduction of fresh business, but it also adds to the revenue, which after all is one of the first factors considered by an investor, though it is hard to picture any Government looking upon a mere motor lorry as a revenue producer. One of the most far-seeing men of my experience, and it has been my privilege to have come in contact with a few, was the late P. J. Thallon, once Minister for Railways in Queensland. After a flying survey had been completed out back by car, with myself at the wheel, in 1910, months afterwards the Commissioner paid me the compliment of sending for me to discuss a scheme in connection with the feeding of a main line by motor throughout a rich dairying district. He was on the right "tack," but in 1910, not so long ago either, the motor lorry was rather crude in its way; at least, so far as Australia was concerned. A most important point has also come to light in connection with these "rail-feeders" in the U.S.A., where, of course, the business is being brought down to a fine art. Working on the maximum effective range at which the lorry can operate without showing a loss, the average mileage given is somewhere in the vicinity of 120 miles. In taking that distance into consideration though, one must remember that this only holds good in the United States, and in all probability is over excellent roads. Beyond the 120-mile limit, however, the rail transport has proved itself to be decidedly more economical. Another big factor to be taken into consideration when laying down a new railway is that

it is there for ever. There is no picking it up and diverting it into a new district in the same manner as water can be diverted in an irrigation area. No matter how the population and seasons may fluctuate, there is no chance of diverting the line in another direction, which may be a more profitable one.

It is here, then, that the motor lorry will have such a huge advantage over the railways; it can change its route when occasion demands without suffering any undue loss. And this, one can see at a glance, is a very big factor in itself. One can safely say that the same argument holds good with the motor truck in the city. Take the trams for instance. The lines inevitably follow the routes that are most payable, and with the paramount aim to convey passengers from the suburbs in a direct line as much as possible to and from the centre of city business. Just let us consider London for example. Probably no one knows and realises better than the "digger" the enormous part played by the motor 'bus in that "little township." The exact proportion of the population that is carried by the motor 'bus is somewhere in the vicinity of 25 per cent. of the entire population, and this, in spite of the trams, tubes and taxis.

Then think of the amount of produce that must be brought into London by aid of the motor lorry, which greatly relieves the railway congestion, and is inevitable where short haulage is concerned. The Americans, you know, look upon short haulage as a loss, their surmise being that "short rail-road hauls mean high freights." In this country long "rail-road" freights generally mean "no freight" at the finishing post. The further she goes, the bigger the gain to "Pilferer!"

So the use of motor lorries in bringing produce cheaply and quickly to the market must assuredly develop when their true value is learnt. Crossing the "Herring Pond" once more for the U.S.A., we learn in that country that the farmer is the largest user of the motor truck, whilst amongst the balance of truck users the retailers own about 15 per cent. less than the farmer, and the manufacturer 10 per cent. less. But of course the Yankee truck, for which we pay through the nose in this country, is a cheap proposition in the States, and is not a drain on the pocket of the average go-ahead farmer.

And as there is a limit to our financial resources, therefore there must be a limit to our railway building capacity. The more one thinks of it the more one feels convinced that the motor lorry will fill the gap along those lines that have been clamoured for so vainly and for so long by the people of those particular districts. The Americans are seriously considering the motor lorry as part of their railways, taking delivery of goods in lorries from places that are not connected by rail, carrying them long distances per rail, and finally transporting them to destinations far from a terminus by the same railway truck service, and all at one through rate.

But—and a big BUT too—the governing factor so far as we are concerned with the success of the motor lorry in this country will be the question of good roads. Instead of spending money on branch railway lines that at the very best can never pay, it would be far better to lay out half the amount in motor lorry services and their accompanying equipment, and good roads.

If we are to make a success of our road transport, then we must again face the deciding factor, and make our watchword "Roads—good roads—plenty of them, but good roads." Unfortunately when we do get a good road, in time it is allowed to crumble away for the lack of thorough attention. Not so the ballasting of the railway, though. Not on your life! And yet the care and consideration of our roads are every bit as important as the care of the rail-road, not only from a commercial viewpoint, but also as a national asset in time of war. Touching upon good roads and war recalls to mind an awfully nice letter from one of my readers. Here it is:—

"I have always read with interest your articles in the 'P.R.' on motoring, not losing sight of course of your activities when on the other side." (That is really very kind and much appreciated.—G.) "However, to come to the point, one cannot help feeling that our present method of transportation is hopelessly out of date, and we naturally turn to the possibilities of the motor. Where to get the

vehicle that will do the job cheaper and better than bullock and camel teams is my problem, which is common with hundreds of others out in this semi-drought-stricken and roadless land of long distances. At the present time we have two bullock teams carting wool to the river, a distance of 20 miles, 40 miles there and back, and it has taken them four weeks to shift 24 tons of wool. The value of the 32 bullocks engaged at £25 per head would be £800, with the waggons £100 the pair. By this you will see that after noting the amount of capital employed to get the described result, it looks very much as though we are hardly moving with the times so far as transportation is concerned.

"The cost of two men of course has to be added. For this I allow £9, which includes wages and keep. But this example is hardly to be called a fair estimate of cost in normal times, because the animals are weak from the rather indifferent season, and again heavy rain has caused delay, which is not common in this country.

"A fair mode of comparison would be to take ruling carriers' rates for hauling, which is 1s. 6d. per ton mile, with no obligation on employer to provide back loading, although this is often provided. Of course motor adherents must not forget that there are no roads out here; they are only bush tracks.

"My idea of the correct type of vehicle is one that is capable of carrying about 1½ tons, and towing a similar weight trailer, both shod with pneumatic tyres. Heavy vehicles those shod with solid tyres appear to me to be quite unsuitable. What do you think?"

My reply to that is:—"The same as you surmise. The vehicle appears to belong to the light lorry class, shod with pneumatic, or one for a tractor of the 'Cletrac' or 'Holt' type. So much would depend upon the work that would be found for it between whiles. But here again you see the road is the deciding factor." But at a time my correspondent and myself would have had together at that show! For sheer interest's sake we would have gone over the "big p'fellars," such as those two magnificent British productions, the Leyland and Karrier, followed by the Berna, Hallford, Albion, Dennis, Gay, Thornycroft, and De Dion. Out of all that "bunch," for city work give me the beautiful De Dion, but for rough out-back 5-ton jobs the Karrier or the Leyland would "suit me nicely, thank you!"

Turning to the smaller fry, we at once come to the type of machine my correspondent is after. In this class we really must not consider the English or European manufacturer; it is this type of vehicle that the American predominates in this country. Amongst the most likely machines would be the public, Federal, and I.H.C. Which one we would decide on would be a matter for lengthy discussion re conditions of nature of soil, temperatures, &c., all of which are important factors. The great point is to collect all the figures possible, and when calculating running costs, not to neglect that very important factor, "depreciation." On such roads as ours, this "party" plays a very important part indeed, a part which should help a great deal to emphasise the fact that when you get an opening, bang away at "any ole head" of importance of good roads. This can never be over-estimated, and in time your efforts must bear fruit, the benefit of which will be reaped by the nation. And when your little die asks: "What did you do in the Great War, daddy?" you will reply, "Not much. Got a commission and a D.S.O. and I did help to build the great road of prosperity in Australia." Cheeroh!

Three Australian stories have come to hand for notice at the Christmas season, from Messrs. Ward, Lock and Co., London:—"Once at Boonderong Camp," by Lillian M. Pike (3s. 6d.), deals with the experiences of the naughty boy Bruce at a construction camp, which experiences make a new man of him. "Lester of Kurrajong," by Mary Gaunt (3s. 6d.), begins with a journey across the Commonwealth to meet a returning father. A Dick, and Merle, a bush girl of 13, are the principal actors, the book describes their every-day experiences at a station the back blocks. In the third volume, *Laughing Water*, by Neil Turner (3s. 6d.), the hero is a midshipman, and the heroine Neta. In all three books the drawing and development of character is the chief interest, and the works will undoubtedly be favourite gift books.

Literary Supplement.

Sporting Notes.

BY "FIFE AND DRUM."

At long, and at last, the prohibition of racing in Victoria has been removed, and, after nearly nine weeks, we are to be permitted to participate once again in our favourite pastime. It is a little curious, but how long the state of peace may last is quite another question. At any moment, apparently, some other collection of labourers may take it into their heads to strike, and we may instantly be prevented from pursuing our natural course of life. We will pass on to a more cheerful subject, however, and will endeavour to forget the strike, the strikers, and the struck.

We are actually going to race at Flemington upon Saturday—this is the Friday before the Newmarket—and we will mention the result before going to press. But, meanwhile, I do wish to say good-bye to the cricket season. The last of the Tests has just been completed, and, as you know, Australia has won every match of the series. In these pages this result was more or less predicted before the first ball of the season had been bowled. It was this way. Have such of you as have families arrived at that time in your life when you have discovered that your eldest boy, lately home for his holidays, can put you through at tennis? It is a humiliating and a somewhat terrifying experience. For the first half of the game you may have smiled, in an uneasy sort of a way, thinking you were merely lazy, or completely out of form somehow. Then you have bucked up all you knew, and have played just as well as you have been in the habit of doing during the last twelve months, perhaps a little better. But still young hopeful has given you a thorough licking, and he is going to continue to do it every day of your life, if you give him the chance.

That is just what has happened to the team of Englishmen who have completed their season here. They have discovered that the young fellow has been too good for them, and they have acknowledged the fact like sportsmen. Individually, many of the beaten team are still absolutely splendid. Hendren, for instance, seldom gives you a dull moment. When his eye is once in you almost expect every ball which he receives to be sent to the boundary, especially those on the off side of the wicket, and with less effort than I ever saw anyone else accomplish the feat. It is really very beautiful. Hobbs is still the champion batsman of the world, but I fancy he is a little more prone to get his leg in front of a straight one than he used to be. I shall never forget the calm way in which, when Park was put on for a few overs at the end of the day, he cut across his wicket and sent balls, apparently on his middle stump, to the leg boundary. Poor Hearne, of course, we have not seen since the early days of the tour, he having been stricken with what I am afraid has proved to be a very serious illness.

Douglas has batted simply magnificently during the latter half of the season, and his bowling, which, earlier, seemed to have lost its sting, came again with its old-time swerve and devil. Woolley has been the best man in the team, all round, to watch. His bowling has been wonderfully accurate. He has a very easy, graceful action, whilst his batting is always a beautiful sight. I don't know anyone who drives a ball so hard along the ground to the off, with so little evidence of exertion, and the tall man's fielding in the slips has been as near to perfection as possible. Makepeace, a splendid fieldsmen, has been a bit sticky in his batting, and for a good long time one thought he was going to be a failure on Australian wickets. But just when things looked hopeless, before the Test match in Adelaide, he suddenly found his form, and has played some splendid innings since. A quiet, reserved, silent little man he seems to be.

Rhodes is scarcely the famous Rhodes of old. He bowls with his old accuracy, but without the snap, and has fallen into a dreadful habit of missing catches. He caught some quite nice ones too, of course, but there were a number that

escaped his hands that should have been good gifts to the English side. Russell was out of form when he first arrived in the country, or more likely he had failed to catch on to the pace of the wickets, and the brightness of the sunlight. But as time progressed he was rapidly finding his way to his old place, when he unfortunately injured his thumb, and was hors de combat for a long while. Wilson did not do much with the bat, and is a little slow in the field, but his bowling is capital. I see one critic writes that he is the most accurate slow bowler since Alfred Shaw, and I am quite of the same opinion. He could bowl all day long without tiring, and I wish he had been used more in Test cricket.

Fender is a delightful batsman. Free, easy, and perfectly happy in taking risks that no professional could afford to do. His bowling has been full of guile, and he has captured a satisfactory number of the best wickets opposed to him. His fielding in the slips has been first rate, although he has dropped one or two catches, a misfortune which will happen to everyone in this position in the field, especially off fast bowling. Parkin was the best bowler of his side, but our wickets here are terribly against him. He can bat, too, if he would only enter into that portion of the game with seriousness. But he loves too much to play the clown, and make people laugh. I never saw anyone who could nick the ball up off the ground with his foot so cleverly as he does. But that is scarcely genuine cricket.

Strudwick was almost as good at the wickets as ever, and was only second to Carter. But it was in the tail that England failed so badly. Dolphin, Howell, and Parkin could not be depended upon for six runs between them, and Waddington, too, was very disappointing. The latter has a nice style of bowling, and fields with energy, but he missed more catches than was quite excusable. And then, added to everything which was working against her, Old England did suffer the most cruel luck. The members of the team denied this, and put their defeats down to the fact that the other side was simply too good for them. But the ill fortune was there right enough. Hearne, Russell, Hitch, Waddington, Howell, and latterly Hobbs, all suffered either from sickness or accident—about forty per cent. casualties. I do indeed call that bad luck.

But what of Australia's side? My own opinion is that it is magnificent. There is no tail, unless you can call McDonald that. And McDonald, when he chooses to put his mind to it, can bat splendidly. I have seen him. Mailev, too, can make runs nicely, and so can both Carter and Oldfield, and they would come out strongest when faced with a crisis. I think Mailev is the best "googlie" bowler I have ever seen. I have never played a ball from him, but I fancy there must be something very deceptive in his flight. He puzzles and takes in even the highest class batsmen, and he possesses a magnetic power of making the enemy do exactly what he asks them to do. We all know that there are two ways of playing him. You must either go right out and catch him on the full pitch, or so as to be able, at least, to smother him, or you must stay at home. But he induces the best of batsmen to rush out to him. The ball then drops to the ground in a hurry, and Carter does the rest. Considering his style, Mailev keeps a good length, but on the slower home wickets, and with a great many more good amateurs stepping out to have a go at him, I am expecting to see him come home with an awful average. They are bound to knock him off his length, and when that happens it is good-bye.

Kelleway has been bowling very well. It is a dreadful pity that he cannot go home. Hendry, however, who is taking his place, is a thorough cricketer, and I expect to see him succeed in the Old Country, both with bat and ball. Armstrong we need hardly mention here. Of course, he is a great cricketer, one of the greatest of all time, and a fine captain. But we have nearly seen the last of him in Test cricket in Australia. It is well that he should leave the stage in such a blaze of triumph. His bowling has been exceedingly good, too, this season, although his fielding, as is natural in one of his build, has gone off very perceptibly. Carter is the best wicketkeeper living at this moment, and no more need be said. He is a thorough sportsman, too.

Gregory is the most picturesque figure in the present-day game. He is developing, nay, has developed, into a great batsman. In the slips he is king of them all. But slip is a queer place, you know, and even Gregory misses them every now

and again there. Yet he takes some chances that no one else possibly could reach, and, falling with all his long length on mother earth, holds up his brown arm with the ball stuck fast in the prehensile fingers. He is awfully quick between the wickets. He seems to take only about three strides down that long twenty-two yards, but he actually does take ten. I have counted them frequently, when he was going for all he was worth. I cannot help thinking that he will go off as a bowler. He can't do everything, you know, and his action is so tiring, and he pounds that left foot of his down with such force that something or another must go, either the earth or his foot. And it won't be the earth. He is a great man, and a lovable, I believe. Taylor is threatening to be the best and prettiest batsman in the world, and his fielding is simply superb.

Collins, when once going, is a very hard man to dismiss, but he has been let off time and again before he was set. He is a rare field, and can bowl well at a pinch, and he is a good captain—a thorough cricketer. Bardsley is as good as ever, I think. He is beautiful on the off side. There is not a better fieldsman in the world at this moment than Pellew, and he is a slashing bat. An athlete from head to foot.

It would be superfluous to mention Macartney. He is surely Trumper over again, one of the most charming, exhilarating and graceful of batsmen, a capable field, and a useful bowler. Ryder, on his day, is a lovely batsman, and his bowling always takes watching. It will be more deadly on the home wickets than here. I must say I would sooner hit up a catch to Ryder than to any other member of the team, but you take a horrible risk if you lift a ball to any one of them. None of them are slow, and each is nearly as good as another. That is where Australia has scored so heavily off England. I see critics making moan that our bowling is weak. They are too greedy. We cannot expect to have an absolutely perfect, utterly unbeatable eleven. And that is what anything superior to our present combination would be, I assure you.

The Yearling Sales.

And now we are back to the turf again, for which we are all truly thankful. Autumn is upon us, and those of us who are young are busy, quite unwittingly, manufacturing reminiscences, the middle aged are recalling theirs, and the old are, with garrulity, boring the young by dwelling upon them all too long. It has always seemed to me that this time of the year is the harvest for reminiscences of turf happenings. The sport is always so good, the weather so ideal, the outlook for the coming winter so full of good cheer. Already the annual sales are over, and, in good sooth, they have given the lie to all the gloomy anticipations which had been formed concerning them. Prices have kept up well, and sellers are satisfied.

Mr. Mackinnon led off the business with what is known in Scotland as a "displeenishing roup" of all his stock. It was dreadfully hot weather, and a bit of precious hard work it proved, motoring all the way there and back. I was lucky, in that, in company with Mr. Ken Austin and Captain Raymond, Mr. Denison's manager, I stayed the night at the homestead. It was a little depressing, though, knowing as we did that we were visiting the place for, most probably, the last time. After dinner, in the gathering darkness, we wandered out to the bridge over the river, in the vain endeavour to catch a wandering breeze. But in spite of the heat it was very beautiful, and formed one of those reminiscences of which we have been talking. The river glided along with scarcely a murmur, there was but a faint gleam of light on the water, but away to the right a red full moon was rising through the tops of a cluster of dead trees. It was deadly still, except for the shrill whistle of the wings of wild duck as they flitted up and down the river to and from their feeding grounds. It was very beautiful, in a sad kind of way. The sale itself was, in some respects, very good, although the yearlings were just a little disappointing. They had not come on latterly in the way one expected, and some lots looked a little backward. Had the sale come off at the time as first advertised, they would have been a great deal better. But I most certainly think that there were some very fast gallopers amongst them, more especially the Perdita colt, the Heedless colt, the Polacca colt, and Sal's chestnut. Kel Owi's brother, too, looks like going a rare pace.

The mares sold uncommonly well, and Radesia easily topped the lot when she fell to Mr. A. T. Creswick's bid for two thousand five hundred. I couldn't help wondering what might have happened if Mr. Andrew Chirnside had been at the ringside in one of his best buying moods. There could have been bullion flying to some tune, I take it. Mr. Hawker took a very high qualified mare in Clarissa back to South Australia for a cool thousand, and Captain Raymond secured, and at not a penny too dearly, Belle Sauvage at four hundred and sixty, and Lady Santoi at five hundred and ten. Mr. Creswick, likewise, captured Perdita for a thousand and twenty five, and Quintanona went away for as far as Muswellbrook for five twenty five. What a lovely collection of mares they were. And now they are scattered to the four winds of heaven.

The other sales, at Newmarket, are now over, and it was somewhat interesting to notice how all those youngsters we have been talking about during the last few weeks caught on in the public eye. Mr. Falkiner's average certainly went far towards confirming our opinion that they were the best that we had ever seen under the one roof. The score which were sold brought an average of over four hundred guineas, and that is a pretty little paying proposition.

Mr. Leslie Aldridge topped the market with his average for three. His lovely colt out of Auraria's Daughter by All Black was taken by Mr. E. J. Watt for nine fifty guineas, his St. Anton-Princess Aura colt also falling into the same hands at five hundred, and the St. Spasa colt out of Althien going to Mr. Phil Heywood for a hundred and ninety. Mr. H. Aldridge's big string, looking well, sold satisfactorily, the brother to Elmira topping the lot at eight hundred and fifty. All the colts and fillies in the Messrs. Aldridge's string were in magnificent condition. My word! but they do know how to put the feed into them so as to bring out very quality of the best. No stuffing, mind you. It was all good, solid material, and the colts were developed like three-year-olds. I never saw anything like it. Mr. Clarke's were all knocked down at paying prices, but not a penny more than any of them deserved, and we may notice them and some other lots next month, when we may have more pace.

Racing again at Flemington.

Headquarters gave us a cold reception on Saturday. On New Year's Day we were stewed and parboiled. Last Saturday we shivered a little in a great-coat. The attendance, thanks to strikes and the postponement, was small, but the sport excellent. Stout bodied, brave hearted old Nick-a-jack, a perennial of the right sort, won the Pines Hurdle, and you could have written your own ticket if you had wished to back him. Then came the Leger, which the majority of racegoers looked upon as a certainty for the Derby winner, Salitros. But yet another of those glorious certainties came utterly undone. Salitros had been playing the part of a commercial traveller during the last fortnight, having been twice backwards and forwards to Sydney. It is a tiring journey for a man, unless he is a good sleeper, and has a comfortable berth. For horses, in hot weather, it must be purgatory—or the other place. With this in mind, Mr. James Wilson was uncommonly confident that he would come home with Nautical. He was perfectly right, and Nautical made a sad fool of the Derby horse.

I think the chestnut gelding would have won however the race was run, but, as it was, Salitros hung back in the rear, allowing Nautical to establish a very long lead with no exertion to himself. One heard people shouting, "Now he is going to catch him." "Yes," I heard Mr. J. H. Davis, the handicapper, muttering partly to himself and partly to me, "But he has to beat him when he does catch him." And this was a sage remark. No hope. Nautical, "on the bit," was "home and dried" before Salitros passed the post, to use the racy expressions of the day.

Then came the Essendon States. Eurythmic looked just right to me, considering what is looming in front of him, big, muscular, mellow, confident, contented, clean inside, and exactly in that state of health that a good gallop or two with the colours up will land him at the post fit to run for a kingdom. Mr. John Holt is really a very clever trainer, a "genius genuine," to quote old Chifney.

To-day Eurythmic was ridden a nice race, and, with a good lump up his long sleeve, held Accrington, who was also in rare, big, blooming fettle, at his arm's length, with

Millieme not far away, third. King of the Sea ran fairly, and will benefit by the race.

The Newmarket was a great race for betting upon, the cry being "nine to one on the field" as the starters left the enclosure. There was a faint glow of sunshine as the thirty-one runners lined up at the barrier, and when Mr. Rupert Green let them go, with no delay and to a perfect start, it was really a soul-stirring spectacle. A furlong from home Rathillet and Rostrum seemed to have a capital chance, both going great guns, nearly in a line with Blue Cross, who was in the centre of the course. Sir Ibex and his great rival, Cetigne, were making up ground fast on the far rails, with Emblematic and a big bunch of horses on their girths, but Harrison made his effort at exactly the right moment, and Blue Cross at once drew out and won, quite decisively, by a length. Rostrum was second, a half-neck in front of Rathillet, with Sir Ibex a head away fourth, Cetigne nearly level fifth, and Emblematic sixth. It was a satisfactory race, and if the bookmakers dropped some money on Blue Cross they must have been gambling if they did not "get round."

Mr. E. E. D. Clarke is to be warmly congratulated over his win in the Sire's Produce Stakes. His beautiful chestnut filly, Isa, had never appeared in public before, and the punters went for Antarian, a smashing, fine, sprinting sort of a horse. Not a Derby colt, mark you, but a great galloper over a course up to six furlongs. It was a nice looking field. Little White Star, a great favourite of mine, was in rare buckle, and she is very charming. Sefton is the good looking Land of Song colt that won the Debutant Stakes in October, and Salatis, the gigantic brown by Shepherd King from Traquette, has the biggest thighs I ever saw in one of his age. But he is an overgrown, wayward, wilful beggar, and I should have liked well to have seen him cut and turned out till he was a four-year-old. Then he might have proved himself an almighty smasher. As it is, I shall be afraid of his future. Mr. Rawdon started a fine big Mountain King colt named Tiernach, and he showed that he has a lot of pace. But he died out in the straight, and palpably wants time. The race was run at a true pace all the way, with Antarian right up in the van until the field had swept well down into the straight. River Star came out shockingly wide here, and lost her chance, but Isa, running as straight as a dart, glided through, had them all well beaten in a hundred yards, and flew home a very handsome winner by a length and a-half in 1.28½ for the seven furlongs. Of course, I fell deeply in love with the mare, and my seared and ancient heart has received yet another heavy wound.

The Late Sir Frank Madden.

Before closing I must add a word upon a sportsman who has lately gone away from us. I mean Sir Frank Madden. I only became acquainted with him after he was struck down by his fatal illness. I had known him well by sight, of course, and it was sad to see him, shorn of his ancient strength, lying like a wounded warrior, cheerful and game to the last, waiting for the end. We talked a great deal during those few weeks on sport, and on, I think, every other subject under the sun. He was a tremendously well informed man, took an interest in everything, and had very pronounced and unshakeable opinions upon everything which he took up. I had learned to love him very much when, one evening, I found his pulse quickened, his face a little flushed, but his spirit unconquerable still. And that was the beginning of the end, and I saw him no more. He sank into insensibility, and a few days afterwards passed away in a merciful euthanasia.

Blood Sires.

BY "FIFE AND DRUM."

Fisherman.

We have a variety this month in the way of blood sires—an old-timer, and one of modern date. I do not think there could be anything much more interesting than a new reproduction of old Fisherman, a horse whose doings on the turf and at the stud left such deep marks on the pages of history. The picture (on page 194) is from a photograph of a painting in oils, which is in the possession of Major Alan Currie at Ercildoune, and he very kindly had the photograph taken

and sent a copy on to me. The artist was Henry Barraud, who was born in England in 1811. He exhibited fairly freely in the Royal Academy, and was very popular as a depictr of horses and dogs.

I like the painting well, although the horse is standing in the usual old conventional attitude in his box. But what painter, even to-day, does not follow in the same old lines. The head may be a little exaggerated in its snake-like appearance, but I fancy the make, shape and colour, taken all round, are a very faithful reproduction of the appearance of the famous horse, which has done so much for Australian blood stock. Fisherman, before being exported to Australia, won sixty-seven races, including twenty-three Queen's Plates (two miles each), two Queen's Vases, nine cups, and thirty-three other races. His owner, old Tom Parr, regarded his defeat of Misty Morn as the greatest performance of all. Misty Morn had won twelve races that season (1858), and the old horse gave him sixty-five pounds and a head beating. Old Carbine gave Highborn three stone eleven in the Melbourne Cup and a handsome licking, but this was four stone nine. Wonderful!

I have not inserted the Bruce Lowe figures in the table, but you will observe that I have indicated, by letters, to which of the three great houses, in tail male, each of the individuals which form the thirty-two quarterings traces. Eclipse comes in sixteen times, Herod ten, Matchem four, the Godolphin, independent of Herod, once, and the Darley Arabian, free from Eclipse, once. With all his wealth of chestnut blood, can anyone tell me whence Fisherman acquired his pure dominant brown characteristic? One cannot leave the subject without reminding you that the horse's name is for ever linked with that of the Messrs. Fisher, and Maribyrnong.

Nassau (Imp.).

This horse stands in New Zealand, and he is already a successful sire over there. We have seen Surveyor, one of his best sons, in this country, and a rare good horse he is, although unlucky, and in New Zealand he has good winners in Starland, Leithfield, Royal Box, Primus, Orange Bitters, and others. Nassau himself is a big, lengthy fellow, reminding me, in the photograph, distinctly of his great sire, William the Third. The pedigree is particularly strong in Bird-

catcher, and, in mating him, one might as well bear this in mind, and drop in more Touchstone and Blacklock, particularly the latter, and, of course, more of an anti-Eclipse infusion, for Nassau is very strong in that line, and correspondingly weak in Herod and Matchem.

You will not remember that particular Buccaneer, the sire of Stolen Love. He was foaled in 1888, I think, and fell into the hands of Lord Roslyn, who was a very young man at the time, and, as far as I can remember, had not owned



NASSAU (IMP.).

racehorses before. Buccaneer won him the Ascot Gold Cup, and his lordship was seen on the top of a drag riding a tremendously vigorous finish as the horses came racing up the straight. He was keen at the moment, but dropped out of the sport before very long. By-the-bye, I must apologise for not inserting the family figures of Buccaneer and Privateer. I have not the book of reference at hand, which would give me the required information, and happening to be too seedy for words at the moment, I am unable to go into town to get it. Sorry!

FISHERMAN (11). Br. horse, 1853, imported 1860, died 1865.	Mainbrace	Sheet Anchor	Lottery	Tramp	(Dick Andrews (E) dam by Gohanna (E))	NASSAU, bay	William the Third (3)	St. Simon (11)	Galopin (3)	Vedette (11)	(Voltigeur (2) Mrs. Ridgway (3))
			Mandane	(Pot-8-os (E) Young Camilla (H))						Flying Duchess	(Flying Dutchman Merope)
		dam	Morgiana	Muley	(Orville (E) Eleanor (E))			St. Angela	King Tom (3)	Adeline	(Harkaway (2) Pocahontas)
			Bay Middleton	Sultan	(Sellm (H) Bacchante (H))						
	Bustard	dam	Rosanne	Dick Andrews	(Joe Andrews (E) dam by Highflyer (H))		Gravity	Wisdom (7)	Blinkhoolie (10)	Aline	(Bataplan (2) Queen Mary)
			Rosette	(Benningborough (E) Rosamond (E))							(Stockwell (3) Jeu d'Esprit)
		Castrel (ch)	Miss Hap	Shuttle	(Young Marske (E) Vauxhall Snap (H) [mare (Darnley) Sir Peter (H) Miss Hervey (E)]			Enigma	The Rake (1)	The Sphinx	(Wild Dayrell (7) England's Beauty)
				Sis. to Haphazard							(Newminster (2) Madame Stodare)
	Bustard	dam	Orville	Benningborough	(King Fergus (E) dam by Herod (H))		Stolen Love (3)	Buccaneer	Adventurer (12)	La Favorita	(Newminster (2) Palma)
				Evelina	(Highflyer (H) Termagant (Go- [dolphins])						(Thormanby (4) Miss Armstrong)
	Bustard	dam						Primula	Lord Lyon (1)	Giantess	(Stockwell (3) Paradigm)
											(North Lincoln dam by King Tom)
	Bustard	dam					True Love	Sterling (12)	Oxford (12)	Whisper	(Birdcatcher (11) Honey Dear)
											(Flatcatcher (3) Silence)
	Bustard	dam					Carine		Stockwell (3)	Mayonaie	(The Baron (24) Pocahontas)
											(Tedington (2) Picnic)

Owner—Mr. G. L. Stead, New Zealand.

Agriculture.

Australian Grain Crops.

The Season.

A spell of warm, muggy weather the end of February produced rains over the agricultural areas of east and west Australia. Generally, the falls were steady and soaking, but in some districts, notably in the north of South Australia, they were of a torrential character, and probably did more harm than good. On the whole, though, the break, even if it was rather early, will be welcomed by the farming community. It makes ploughing possible in the heat belt, and will also germinate weed seeds in the fallow and stubble, which can later be turned under or fed off. As most of the wheat is now carted to the stations, farmers will doubtless utilise teams for ploughing. Given a continuance of favourable weather this early start in cultivation should mean an increased area sown later, and, what is more important, a clean seed bed.

Up to the time of writing the f.a.q. wheat standard for last harvest has been fixed in Victoria, South Australia and Western Australia. For Victoria and South Australia it is 64 lbs. per bushel, and the western State 62 lbs., as compared with 62, 61 and 64½ lbs. for the previous crop. No doubt the larger than usual proportion of bleached wheat in the samples accounts for the lower average. Bleached grain weighs light, and its presence is an important factor in determining the standard.

No further official estimates of the wheat production have been published, but it is gathered from various sources that the crop hardly yielded as heavy as expected. Apart from the fact that a good deal of grain was bleached and damaged by the heavy rains in December and early January, "take-all" in certain parts, particularly northern Victoria, materially reduced the yield. Last month we talked about a total of 155,000,000 bushels for the whole Commonwealth. A five per cent. reduction in view of the above more recent data brings it down to 147,000,000. This may perhaps be a little too optimistic, but it will probably be found nearer the mark than the 130,000,000 bushels forecasted by the chairman of the Australian Wheat Board a couple of weeks ago.

Maize and summer fodder crops have greatly benefited by the recent rains. The coastal districts of the southern States were previously very dry, and crops in many localities were a bad way. However, they should now recover, and good yields may be obtained. Queensland and northern New South Wales maize growers are much exercised as to how they can dispose of their surplus production. The market is dropping, and as the heavy new supplies come to hand will weaken further. Queensland growers have decided to form a pool something on the lines of the State wheat pool, but whether the project will assume definite shape remains to be proved. For one thing, it will be necessary to obtain Government support; finance is another matter that will present difficulties.

The proposal to create an oat pool in Victoria has not been sympathetically received by either Federal or State Governments. The Federal authorities say it's a matter for the State, and the latter make it plain that they do not favour any more pools at all. The Minister for Agriculture suggests that the glut might to an extent be relieved by crushing oats and feeding to dairy cattle. A similar proposal has been made in New South Wales to utilise some of the surplus maize there. The idea seems sensible and worthy of careful consideration, specially in view of the great scarcity of bran and pollard. The export flour trade is at present overabundant, millers not being able to compete with America at the prices fixed for wheat by the board. That means many mills are closed or only working short time, and there is an insufficient supply of offals. Crushed oats and maize are proved feeds for dairy stock, and it should be possible to work up a good market during the coming months.

It is estimated in trade circles that Victoria alone has this season produced 12,000,000 to 15,000,000 bushels of oats,

which is about equal to a normal yield for the whole of the Commonwealth. The crop in the other States will probably be six or seven million bushels. The average price in Melbourne for the last 19 years has been 2s. 7½d. per bushel. The market to-day is below that figure, and taking seed, labour and interest into consideration current values can hardly cover cost of production, except where very heavy yields were obtained.

The Pools.

The announcement by the chairman of the Australian Wheat Board that arrangements had been made to pay the second advance of 2s. 6d. per bushel on 1920-21 certificates early in April, instead of at the end of that month, will be received with satisfaction by growers. It will materially assist them to meet their maturing liabilities. So far, the board has not reached a decision regarding making the surplus certificates transferable. Consideration has been postponed until the March meeting. With regard to the extra 2s. 6d. guaranteed by the New South Wales Government, Mr. Dunn, Minister for Agriculture, states that payment will be made before June. If it is impossible to obtain cash by then the Government will pay in bonds, carrying 6 per cent. interest.

It was hoped that something definite would have been done at the February meeting of the board in the matter of finalising the old pools. However, judging by the official statement of the business transacted, matters were forwarded little. The chairman gives out that "negotiations with the British Wheat Commission in regard to profits on diversions under the 3,000,000-ton contract are now approaching completion, and it is hoped to make an early announcement." It seems as though we have heard the same story for years; anyhow, it has a very familiar ring. Regarding the 1919-20 pool, he states that "to avoid undue delay in winding up, it was agreed that any State which could not be in a position to ship all its old wheat by 31st March should, on its own responsibility, declare the weight of such wheat, and that a corresponding quantity of new wheat should be realised on account of 1919-20. Any loss by deterioration must be borne by the season concerned. Any shipments of old wheat or flour before 31st March will be on account of the 1919-20 pool." Assumably this means that the 1919-20 pool is to be definitely cleared up at the end of this month. According to the latest statistics only 176,000 bushels remain unshipped, of which 158,000 are in shippers' stocks in South Australia, and 18,000 in millers' stocks in Victoria.

Another matter discussed at the last meeting of the board was the local consumption price of wheat. Efforts have been made in certain quarters for some time past to have this reduced. Trades Hall leaders have been particularly active in passing resolutions and trying, without success, to arrange deputations to Ministers. But the Prime Minister of the Commonwealth and the Victorian Premier have refused to receive the delegations on the grounds that "no good purpose could be served." The Wheat Board, after considering all the circumstances, decided that no alteration is to be made in the price.

While anybody with an ordinary sense of fairness will grant that the board is right in not reducing the price for local consumption, its wisdom in failing to adjust rates for grain supplied to millers for gristing into flour for export is open to question. At the present figure, 9s. a bushel, millers are unable to operate, and it has been the same ever since the new wheat was made available. All through the board has kept its quotations above the figure at which American competitors were selling, with the result that a valuable trade connection with the East and Africa has been largely lost. The actual loss of the flour trade is not the only effect; there is also so much surplus wheat unsold, less employment, and a shortage in mill offals for feed. In this latter connection the position is serious, as bran and pollard are so scarce as to be almost unprocurable.

The official returns of the Australian Wheat Board show that the receipts on behalf of the 1920-21 pool on 28th February stood at 116,874,000 bushels, comprising 44,816,000 in New South Wales, 35,140,000 in Victoria, 27,209,000 in South Australia, and 9,709,000 in Western Australia. The total quantity shipped was then 19,365,000 bushels, and local

sales accounted for 5,202,000 bushels, leaving 92,307,000 bushels in the hands of millers and shippers. As regards previous pools, there are still apparently some 6,350,000 bushels on hand, practically the whole of which is shown as lying in South Australia.

Mr. Dunn, Minister for Agriculture in New South Wales, more than a month ago made a statement that an early payment of 3d. per bushel was to be given to holders of scrip in the 1918-19 pool, and of 1s. a bushel for the 1919-20 pool. As, however, there has been no official pronouncement from the board on the subject, it looks as if Mr. Dunn has been premature in his remarks. The same gentleman, in the course of an address to farmers a couple of weeks back, said that three-fourths of the exportable surplus of wheat had been sold at a satisfactory price. This is information that the board will neither confirm nor deny, acting on the principle that it is bad business to tell competitors exactly what balance it has to sell.

A report comes from Adelaide to the effect that the Egyptian Government has entered into a contract for the purchase of 100,000 tons of Australian flour. The price is not stated, but it is understood that half is to be first grade and half second grade.

According to the State Wheat Board the manner in which wheat is being handled by certain receiving agents in New South Wales is most unsatisfactory. The most glaring fault apparently is the failure to separate f.a.q. from lower grade wheats or observe instructions regarding dockage. Quite a considerable quantity of under quality wheat has been coming down to Darling Island and mixed with grain up to f.a.q. standard, and is causing much confusion and delay at the point of shipping.

Bulk Handling.

A visitor from Great Britain, Mr. A. B. Earle, of the English wheat firm of Messrs. S. Sanday and Co., has recently been travelling through New South Wales, and makes some interesting observations on the bulk handling system being installed there. He holds that the retention of the bag system, so far as transport from farm to seaboard is concerned, is practically inevitable on the score of economy. He says:—

"While bulk handling at the seaboard is so simple, so reasonable in cost, and so necessary that all the wheat from Sydney should be shipped in this way, I cannot approve of bulk handling in the country, which will be found to be an expensive amusement. Such a tremendous amount of capital has to be sunk in the country elevator, which, naturally, has to carry its share of interest. The unavoidable expense of a permanent, competent staff at each operating centre can scarcely fail to overburden the scheme. From my recent study of the conditions here, I have no doubt that the cheapest way will be to bring all the wheat to Sydney in pre-bags and empty these either into the hold direct, or, preferably, into the terminal silo. This would mean a saving of 8s. a ton on the present system of shipping in bags, and a large proportion of this saving should find its way to the farmers' pockets."

Questioned on the recent controversy as to the safety of shipping wheat from Australia in bulk, Mr. Earle was emphatic: "Shipping wheat in bulk is absolutely safe, and if I were buying here I would have no hesitation in taking such a risk myself. I was fortunate while being shown over the terminal silos in Sydney in being present when the first load of wheat was passed over the bands into the storage bins. There were about 55 tons, and as an experiment it was quite successful. I can only say that I am very pleased with what they are doing there, and only hope that the whole harvest, both bagged and in bulk, will in time go through the terminal silo for shipment."

Freight.

Freights for wheat have further declined since last writing. The latest quotation is 60s. to 62s. 6d. a ton for March-April loading, and it is said owners are having difficulty in obtaining cargoes at this rate. At its February meeting the Australian Wheat Board allotted tonnage among the States on the following basis:—New South Wales, 33 1-3rd per cent.; Victoria, 32 per cent.; South Australia, 26 1-3rd per cent.; Western Australia, 8 1-3rd per cent. For shipments overseas during February were moderately heavy. For the four weeks ending 28th ultimo a total of 10,303,000 bushels were cleared, and in addition 3,100,000 bushels were sold locally.

The Markets.

Little information has recently come to hand regarding the overseas markets for wheat. Early in March it was announced that Australian and Manitoba had been reduced in London by 2s. 6d. a quarter, bringing the Australian quotation down to 85s. per quarter c.i.f. At 85s. a quarter the selling price would be 10s. 7½d. a bushel in England, or somewhere between 8s. and 8s. 6d. f.o.b. in Australia, according to the freight.

Official quotations issued by the Australian Wheat Board are:—Millers' requirements for flour for local consumption, 9s.; for flour for shipment to South Africa, the East, Pacific Islands, New Zealand, and ships' stores, March-April, 9s.; fowl wheat at lower prices.

Fodder.

There has been no outstanding feature in the fodder market during the month. Maize is a good deal weaker, and oat values are in the main unchanged. The Victorian Millowners' Association has adjusted the price of flour, bran, and pollard, the latter two being raised £1 per ton. There is no material alteration with other lines. The following are current Melbourne wholesale quotations for good average quality produce, compared with rates of a year ago:—

	Mar. 8, 1920.	Mar. 7, 1921.
Bran (2000 lb.) ...	£8/10- ...	£11 to £11/15/-
Pollard (2000 lb.)...	£8/10/- ...	£11 to £12
Oats, Algerian (40 lb.)...	5/5 to 5/10 ...	2/6 to 2/7
Maize (56 lb.) ...	8/5 to 8/6 ...	4/9
Chaff (ton) ...	£8/10/- to £9/7/6 ...	£4 to £4/15/-

In Sydney bran is £9 and pollard £10 a ton; oats, Algerian feed, 2s. 10d. to 3s. a bushel; ditto milling, 3s. 3d. a bushel; maize, prime dry yellow 5s. 3d. to 5s. 6d., white 5s. per bushel; lucerne hay, Hunter River, £3 to £5 10s. a ton.

Adelaide rates for bran and pollard are £10 15s. a ton; oats, 2s. 3d. to 2s. 4d. per bushel; chaff, £5 5s. per ton on truck, Mile End.

Agricultural Notes.

Final Canadian wheat returns show that the yield for 1920 was 263,189,300 bushels from 18,232,374 acres. The figures for 1919 were 196,361,000 bushels from 17,353,000 acres.

Official figures give the total wheat yield in New Zealand for 1920-21 as 5,975,000 bushels, and the average per acre 28.52 bushels. Oat production stood at 5,520,000 bushels, and the average 33.86 per acre.

Returns issued by the Board of Agriculture show that the area sown with wheat in Great Britain last season was 1,928,993 acres, compared with 2,300,704 acres in 1919. The estimated yield for 1920 was 55,496,000 bushels, and in 1919 66,872,000 bushels.

For the ten months ending October 1920 the United States imported from Canada 14,249,121 bushels wheat and exported to the same country 13,989,321 bushels. The principal movement into the States was during May, June, July, and August, and north in September and October.

Lindley Walker Co-operative Wheat Company Limited have received cable advice to the effect that the new wheat crops in Europe and America are favourable, but pests rather prevalent. As supplies from North America are diminishing, importers in European countries must draw more on Argentina and Australia.

Argentine Grain Exports.

(TO BRAZIL INCLUDED.)

	Total 1918.	Total 1919.	1920. 1st Jan. to 16th Dec.
Wheat tons	2,029,419	3,258,259	5,029,528
Maize tons	647,657	2,374,721	4,172,345
Linseed tons	301,073	840,379	988,687
Oats tons	538,536	831,350	393,893

ACRES SOWN.

	1919-20.	1920-21.
Wheat	16,133,500	15,190,250
Linseed	3,563,000	3,534,625
Oats	2,327,500	2,087,500

New System of Wheat Growing.

A good deal of interest has recently been created in France by the reports of wonderful crops obtained by a wheatgrower of Dauphine, M. Pion Gaud, with the use of two-fifths the usual quantity of seed, and on extremely poor land.

According to M. Gaud, the whole secret of his success lies in the working of the soil. His interest in the history of farming showed him that, whereas a hundred years ago there were far fewer beasts on the farms, and consequently much less natural manure available, yet farmers contrived to obtain very good crops with quite primitive implements. Apparently they did this simply by repeated turning of the soil. M. Gaud concluded, therefore, that this repeated ploughing had the effect of greatly aerating the soil, and causing it to become deeply interpenetrated by the free nitrogen of the air. Further, these old-time farmers frequently soaked the corn about to be sown in soot-water, &c., which started germination.

Combining these two ideas (the latter of which has already received considerable support from experiments now being conducted at the Sorbonne University, in Paris), M. Gaud ploughed his land eight to twelve times, using a cultivator six times as wide as an ordinary French plough, and then sowed only two-fifths of the usual quantity of seed wheat. This he had previously soaked in a mixture of his own devising—a mixture of nitrates apparently (the exact composition of which he has promised shortly to make known to the world), and then placed it for a few minutes in a bath of sulphate of copper.

After soaking the grain was put in heaps until the warmth started germination, and then sown in lines an inch deep, the drill distributing superphosphates directly in contact with the grain. The result was prompt and vigorous growth as soon as the wheat entered the soil, with a marked tendency to strong root formation.

The results of M. Gaud's experiments show that whereas he used only a fractional amount of sulphate of ammonia and superphosphate, as compared with his neighbours, and no farm manure at all, he obtained 25 per cent. more grain and straw than they did from heavily manured ground. And, further, on exhausted land he could obtain abundant crops where they could obtain nothing.

"Wet" Sheep.

Mr. J. Sharples, who carried out the wool classing at Murrindindi Station, Yea, Vic., last November, gives us some interesting particulars regarding a case in which sheep were shorn the second day after 300 points of rain on the Sunday afternoon and Monday night, which ordinarily meant no shearing until Thursday or Friday. Thursday being Yea show day put that day out of the question, as the shearers and shed hands were all local men. According to previous experience there would have been four days lost, so the station owner suggested making it a cut out, there being only 900 sheep to shear. The owner of the sheep, a local farmer who had sent them into the station shed, wanted his sheep shorn, so the shearers' rep. was sent for, and he said they would shear on Wednesday if the classer thought the wool fit to press, making Wednesday at 6 o'clock a cut out. The Thursday being show day, it suited the book of the shearers if they could cut out on Wednesday, and thus get a couple of pounds extra for expenses. The classer refused to give the required opinion, as it was never asked for on any other occasion, but he said he would give the owner his views. Anyway, the sheep were shorn, and when the fleeces came on to his table the comeback, fine and medium cross-bred were dry. The exceptions were the rough cross cotted fleeces, of which there was one bale at the end of the day's shearing.

This bale was reported to the brokers, the Australian, Mercantile, Land and Finance Company Limited. It came to hand three or four weeks later, and was examined by their wool expert, and was stated to have shown no ill effects, though shorn just after very heavy rain.

Land and the Immigrant.

We reprint herewith a letter addressed to the editor of the "Sydney Morning Herald" by Mr. Charles A. G. Lillingston, of Yulgilbar, Clarence River, N.S.W., on the subject of land settlement and immigrant settlers. His suggestions, which are set out in ten paragraphs, are no doubt excellent, and deserve the careful consideration of everyone interested in land settlement. We quite agree with the writer that the whole question should be thoroughly discussed by those competent to form an opinion and draft it into the necessary legislative form.

Copy of Letter.

All those interested in land are naturally much concerned at the more or less confiscatory land legislation now proposed. As I am especially interested in land, in settlement thereon, and in immigration, I should be very grateful if you could find the space to publish the following suggestions, which may possibly be of some little use.

In order that Australia should go ahead and occupy its proper place in the world, I regard as essential the following conditions:—

(1) The abolition of the present onerous and restrictive conditions attaching to the acquisition of land direct from the Crown.

(2) A careful and just valuation of all vacant Crown land, situation, quality, accessibility, and water supply being taken into consideration.

(3) The selling of Crown pastoral land in blocks of from 2000 acres to 10,000 acres in sheep country, and from 3000 acres to 20,000 acres in cattle country; from 10 to 100 acres in coastal agricultural country, and from 50 to 500 acres in dairying, fruitgrowing, and wheat-growing country. The only conditions of sale should be the fencing of the land and the upkeep of the fences, its utilisation for the purpose for which it was purchased, and the regular payment of instalments due to the Crown.

(4) The gift of the freehold of certain Crown lands to persons ready to comply with the conditions of fencing and use only. There are large areas of practically valueless waste Crown land in many parts of the State, and on these unalienated lands little or no improvements are made. If the freehold were given to settlers who would fence them and use them, the State would greatly benefit, because it would be to the interest of the holder to improve the property to its utmost capacity, in order that he might derive as large a return therefrom as possible. By this means not only would considerable areas of land hitherto wasted be used, but the holders would have to pay stock and shire taxes.

(5) Immigrants should be discouraged from taking up Crown land, except in irrigated areas, until they have gained "colonial experience."

(6) The construction of good roads, especially suited to motor traffic, should be energetically pushed forward. These roads would act as feeders to the railways, and open up the country in a way nothing else could do. The motor has eliminated distance, and will tend to alter greatly, if not entirely, conditions of life in the backblocks of Australia.

(7) The same advantages as are offered to immigrants should be offered to Australians.

(8) The cessation of excessive and confiscatory taxation in connection with landed property, which, if continued, must cause both the withdrawal of capital from the country and prevent the introduction of new capital.

(9) The realisation of the fact that it is not in the interests of the country to "burst up" arbitrarily the large estates, nor is it just to owners.

If the owners of large estates in districts more or less accessible refuse to sell or to lease land to persons desiring to bring it under cultivation, and who are prepared to pay a fair market price for it, the Government should place a super-tax on that land. But before taking action every care should be taken and proof given that a fair market value could be obtained; that there was a real demand for the land at a fair market price, and that there were no justifiable reasons, such as proximity to the homestead, &c., for the retention of such land.

On the other hand, there are many large estates situated in more or less inaccessible parts of the State on which but a small area of land is suited to agriculture or to dairying settlement, and which can only be profitably worked on a large scale—land on which the small pastoralist, selector, or homestead lessee cannot, without a struggle, in ordinary seasons make a living unless he obtains outside work, which, unless permanent employment is given, is difficult to procure. Estates of this kind, for many years to come, can only be worked with any prospect of success as large areas. It is true that hardy Australians, thoroughly cognisant of all the conditions, hardships, and vicissitudes of

settlement and life in the bush, can and do succeed in making a home and a living on land such as I have described, but I am convinced that generally no one not born to the life would have much prospect of success, and though I am an advocate of agricultural life for the small settler, I cannot advise anyone to become a pastoralist unless he can obtain a considerably larger area of land for the purpose than is possible under existing conditions (I am speaking of Crown land only), and unless he can purchase his stock without borrowing money. Even then, as I have endeavoured to show, the life of the pastoralist is highly speculative, and very different to that of the agriculturist.

(10) That the interests of the State be given more careful consideration. By this I mean that the constant endeavour made to draw all the produce of the State to Sydney, when other ports exist in reach of the zone of production, should cease. The development of the State should be encouraged at the expense of Sydney instead of the development of Sydney at the expense of the State.

Before much can be done to encourage settlement on the land these suggestions should be carefully considered by thoroughly competent authorities—men who have themselves lived on the land, who have the interests of the country at heart, and who have learned, as I have, that "Australian seasons do not run on scheduled lines," that Australia has many advantages, but that it is no El Dorado. I cannot but think if the Government were more inclined to consider what was best for the country instead of for the party, the lot of the settler on the land, in whose hands the productiveness and the consequent wealth of the country really lies, would be vastly improved.

I would especially emphasise the fact that any great scheme of settlement on the land which encourages a purely pastoral life for inexperienced settlers with insufficient capital, or which involves settlement on unirrigated land, or on land which has no absolutely permanent supply of water, would be a very grievous mistake, and must in time result in disastrous consequences. I do not hold with the idea of indiscriminately settling people on the land; many are neither fitted nor really inclined for such a life, and many more who might think they were both fitted or inclined would discover after they had tried it, that they were mistaken.

Clauses one (1) and three (3) really mean the repeal of all existing land laws, and the reversal of the land policy of the State, and there is not a man in either House at the present time who is strong enough to undertake such a task. It seems to us that the trend of democratic legislation on the land question is absolutely opposed to the sale by the Crown of any freehold, and the idea of giving land to settlers, however inferior it may be in quality, would never receive legislative sanction here under present political circumstances. When the state of affairs in Queensland in this connection is considered, it would seem questionable whether the holding of freehold in large areas is not a disadvantage rather than an advantage—at any rate, while leaseholds have remained saleable at good prices during the past few years freeholds have been almost impossible to get rid of at any price. This is because of the ease with which freehold lands can be taxed, and when once taxed the temptation to continually increase the rate of taxation is almost irresistible in a Parliament composed chiefly of those who have no taxable interest in land.

We fully realise that Mr. Lillingston's suggestions should be considered as a whole, but the legislative bodies who would have to amend their Acts are not one—land administration is in the hands of the State, land taxation is in the hands of both Federal and State Parliaments. If New South Wales adopted a policy of selling Crown lands in areas varying from 5 acres to 20,000 acres, it does not at all follow that the Federal Government would abolish "excessive and confiscatory" land taxation, and so long as the latter exists the former would be inoperative, as no one would purchase freeholds.

Again, both Federal and State Parliaments have for years past boasted of their intention to burst up the large holdings of freehold land on the ground that they are not being put to the most productive use, and we are forced to recognise the fact that the majority of voters have indorsed that policy, however much we may disagree with the wisdom of it, and insist on the pernicious results which will ensue from that policy. One only has to read the debate on the "Large Holdings" Bill during the session just closed to realise that the majority of the Assembly are obsessed with a desire to carry such legislation regardless of the hardship and injustice it would inflict on the present holders of the land.

Another question which urgently needs dealing with is raised by Mr. Lillingston in clause six (6), in which he pleads for the construction of good roads. But is not this again a question which is in the control of the voters? The roads are made and maintained by the shire councils, and so long as the councils are composed of those interested in the lands of the shires the roads are, generally speaking, well maintained, but when the councils are dominated by the townspeople, the roads are neglected, and all the resources are squandered on the towns. It is the same spirit in operation in a different sphere of action. What we want to bring out is this—that while the suggestions are all of them good and profitable for discussion, the subject is so large and affects such different authorities, that in order to accomplish anything, and put the proposals into operation, the present-day policy of the Federal Government, State Parliament and local government bodies would have to be reversed, which seems to us a rather large order, and hardly within the range of practical politics just now.

Sheep Breeding in Peru.

In view of a number of inquiries that have reached us lately regarding the possibilities of sheep raising in Peru, we give the following extracts from a paper by Colonel Robert J. Stordy, C.B.E., D.S.O., read recently in London before the Royal Society of Arts.

Colonel Stordy spent six months travelling the southern parts of the Republic, which included a visit to the sheep farm of Atocsaico, belonging to Messrs. Duncan, Fox and Co. Here, at an altitude of 14,000 feet, are run pure and crossbred Romneys and Merinos, and a very successful farm established. Referring generally to sheep husbandry he says:—

"It was not until 1532 that importations of the domestic animals of Europe were made by the Spanish. From then until now, the introductions of fresh strains of blood have been few and far between, with the result that the once-pure-blooded Spanish Merino sheep presents a woefully degenerate picture, so degenerate that the live weight of a full-mouthed sheep turns the scale at 40 to 45 lbs., produces a fleece of 1 to 1½ lbs., and yields a dressed carcass averaging 25 lbs. in weight.

"Apart from the in-breeding, which is the main cause of this retrogression, altitude tends to dwarf the species, and to keep flocks up to a good standard, the frequent introduction of robust stud animals is essential. The flock increase, too, is materially affected in the Peruvian highlands, and among the flocks of the natives an increase of only 40 to 45 per cent. is recorded. The wool industry is also in a primitive state of development. During shearing operations the sheep's four feet are bound together as if it were some cloven hoofed monster; in place of shears a knife is used, but should the knife prove blunt, then a piece of glass suffices. Notwithstanding these crude methods, considerable quantities of wool find their way to the world's markets from Southern Peru. The wool from the degenerate Peruvian Merino possesses qualities which merit attention, and prove that it is capable of rapid improvement by judicious selection and breeding.

"At Atocsaico, where modern methods are followed, good sound fleeces of average weight are obtained. The natural increase of the flock there is said to be equal to 70 and 75 per cent. The results obtained go to show that a highly profitable industry can be established in Peru. While the carrying capacity of the pasture lands leaves much to be desired, sheep, properly husbanded, will prove the best pioneers to create more favourable conditions for promoting the growth of the indigenous pasture grasses, many of which are of considerable economic value.

"Recognising this the Government is about to establish an up-to-date sheep farm, where modern methods of sheep husbandry will be demonstrated, and pure and grade animals reared and distributed. The climate appears to be favourable to the industry, and the Government sympathetic. Possibly large tracts of land would be made available for colonisation if suitable offers were made."

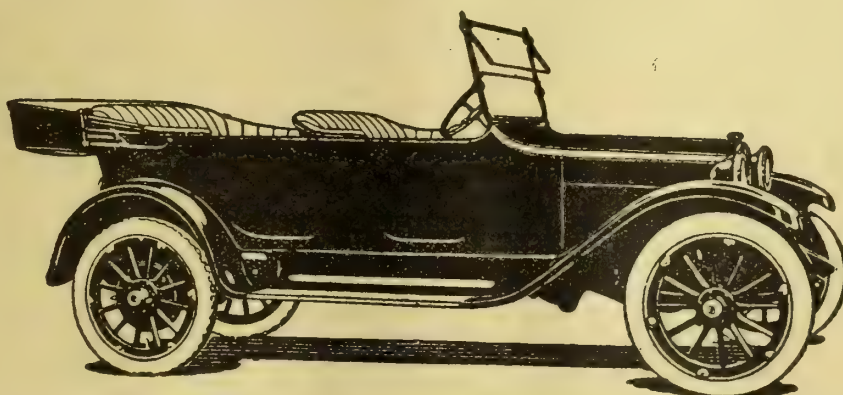
A special correspondent to the London "Times," writing from Lima on the same subject, says that a British expert is at present carrying out a considered plan for the purchase and introduction into suitable upland regions of Peru of high-grade British sheep. The Governmental plan for joining up existing productive regions, inviting new blood and skill, and, in order to offer healthy dwelling places, cleaning up the 30 chief towns, is an experiment of interest for all the northern part of South America.



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The Wool Trade.

The Wool Trade in Australia and New Zealand.

The month has been a quiet one locally, with sales proceeding slowly, and on limited lines. Growers must be prepared for a long drawn out season, as the position is one of great delicacy, and only careful feeding of the demand can save the position.

Reports from all countries agree that if any undue weight of wool is pressed on the market, there will in all probability be a complete break in values.

Unfortunately, concurrent with abnormal supplies of raw wool, the current clip, as a whole, is one of the worst grown for many years, which makes realisation all the more difficult.

The following itinerary of the London sales, showing figures for which quantities had been provisionally fixed, including Government and free wools, will serve to show the position:—5th April to 16th April, 110,000 bales; 3rd May to 13th May, 80,000 bales; 7th June to 18th June, 110,000 bales; 3th July to 27th July, 110,000 bales; 30th August to 14th September, 120,000 bales; 11th October to 26th October, 10,000 bales; 22nd November to 9th December, 120,000 bales.

Of these quantities it is understood that two bales of the carry-over wool will be submitted for one of the new clip, so that there is certain to be considerable overlapping everywhere.

Lest growers be inclined to cavil at some delay in selling locally, the foregoing figures will prove interesting, and they would do well to remember that they are vitally interested in the disposal of the carry-over wool, and that unless the National Council of Woollselling Brokers collaborates at every point with the B.A.W.R.A., as the new company is styled, there will be every opening for disaster. One hesitates to use a term such as the foregoing, but the fact cannot be too greatly stressed that the crust is very thin, and any extra weight would break through.

The Reparation Conference now being held in London is fraught with immense possibilities, and one can only hope that finality will be reached without having recourse to force, although the prospect is not hopeful at the time of writing. On the result largely depends the position of raw wool, as it is felt that once Germany's liabilities are clearly defined she should be in a position to have credit extended to her.

It is certainly galling to think that after all the suffering and misery she has brought on the world we should have to prop her up to an extent, but the fact remains that in helping her, not forgetting to make her pay for such, we help ourselves. Modern civilisation is too complex to permit of any one country being shut up within an iron fence, as it were, and on the rehabilitation of the Continent depends the world's recovery.

America.

The last official act of the late President of the United States was to veto the Emergency Tariff Bill, but, doubtless, the Republican Party will enact some legislation to take its place. Meanwhile, American buyers no longer dominate the position, although it must be admitted that in southern centres at least the great bulk of the choice wools have been disposed of, one firm of operators securing a large wag.

It is a general source of surprise as to why this particular firm should apparently be so much better equipped with information than other houses who have had relations with the States extending over many years, but, of course, it still remains to be seen whether such was quite right. However, for its pluck, or whatever one likes to call it, many growers will have kindly thoughts when the days of forty-penny wool are but a pleasant memory.

At the moment of writing an inquiry is again in evidence on behalf of America, but not nearly to the same extent as last month.

Crossbred Wools.

Recent sales have witnessed a level of values ruling for coarse crossbreds, which has as the only basis of comparison the season 1901-2, and not always to the latter's disadvantage. It must not be overlooked that as compared with the season mentioned, all costs, including freight, overhead charges and combing costs are infinitely greater. This did not count for much while the public was prepared to give practically any price, but with the discrimination that follows a diminishing purchasing power, it has a very marked effect.

Certainly ruling prices for such wool are considerably below the cost of production, but, unfortunately, that has no bearing on the position at the moment, whatever it may have in the future. In the absence of demand, the piling up of stocks only makes confusion worse confounded—sooner or later such must be liquidated, and the only course is to keep on selling, and trust that the very cheapness of the article will create a demand, without which nothing counts.

It is not palatable advice to those who have to sell, but it may be accepted as the base on which all economic laws are founded.

The following comments on the position by a well-known textile authority are much to the point:—

"Lack of employment the world over has reduced buying power, and the financial world has made money too tight to encourage anyone to speculate in wool, although it is apparently cheap when to-day's cost of growing is taken into account. No amount of control can keep prices at a point that leaves a loss to spinners and manufacturers. As the economic position gets worse, the economic value (what people can afford to pay) of wool will get worse."

Crossbred Pool.

It has now been announced that the crossbred pool will not be persevered with, at least, so far as this season's clip is concerned. The promoters state, however, that as there is sure to be a large carry-over of the present clip at the end of June, some further steps may then be taken. The scheme came too late, and never at any time carried conviction, but as repeatedly pointed out in these columns, much could be done in putting odd parcels and mixed lots into better shape for marketing.

The machinery is ready to hand for such, and it only means following to its logical conclusion the system of inter-lotting odd bales, which proved such a success prior to the Imperial purchase wool scheme.

Growers would be well advised in consulting their brokers as to the possibility of bulking their odd bales with a view of creating a good straight line of wool which the trade could buy with confidence of its being true to type, and thereby worth much more than an irregular parcel.

The individuality of such wool would certainly be lost, but that would not count against a better financial return.

March Allocations.

The quantity of wool allotted to the various Australian selling centres was 100,000 bales, of which Sydney's quota was 54,000 bales, Victoria 29,000 bales, and Adelaide 17,000 bales. Neither Brisbane nor Fremantle are holding sales this month, but Tasmania at long last will submit the 11,000 bales allotted to her some two months ago.

London Sales.

The second series, which commenced on the 22nd February, closed on 5th inst. with the market weak and irregular. As compared with the January series, Merinos were from par to 25 per cent. lower, fine crossbred 15 per cent. to 20 per cent., coarser grades 25 per cent. to 30 per cent. decline. America operated sparingly, but there was fair competition from the Continent, in which Germany participated. The next series has been fixed for 5th April.

AUSTRALIAN SALES.

Victoria.

With the second half of the February series in Victoria the urgent American orders were not apparent, but as Geelong brokers had obtained permission to submit half their allocation for private sale, such wools shared in the demand

centring round the departure of a special boat for Seattle. But even then, as compared with Melbourne sales, the bloom was off, and although prices were good, they were not equal to the best by any means. With the actual auctions in Geelong, considerably lower prices ruled, and the series closed under conditions which were the reverse of encouraging for the next round.

Then followed the opening of the London auctions, which registered a general decline. This was reflected in Adelaide, and when Melbourne commenced on 7th inst. anticipations of lower prices were, unfortunately, only too fully realised.

The first day's selection was a poor one, and withdrawals were very heavy. On the second day, with a better range of offerings, competition improved, and some intermittent American demand helped to lift some suitable parcels out of the ruck. So far as could be gauged in a most erratic market, Merinos were all round 25 per cent. lower than in February, comebacks 15 per cent., medium and coarse crossbreds 20 per cent. to 30 per cent. lower, the top price for Merino being 28d., and comeback 22d.

Sydney.

The main feature of the market, particularly during the eighth series, was a persistent weakening tendency, the round closing at a decline of from 20 to 30 per cent. for Merinos, except in the case of the finer haired and sound parcels, which may be quoted as 10 per cent. below the values of the seventh series. Crossbreds are only saleable at less than pre-war prices, and, naturally, withdrawals were very heavy.

The one redeeming point was the competition from Japan, which country, apparently, wants some fine haired wools, such needs being evidently shared in by France, whose representatives made themselves heard at times, but only on really suitable parcels.

The ninth series opens on the 9th inst., when 24,000 bales will be submitted, closing on the 17th, when no further sales will be held until April, no date fixed.

Leading prices included a Uralla mark at 28½d., R/D/Coolong 26d., as also ALSN, with 25½d. for both the New England/A and ABB/The Forest, a good result being 53 bales of the R/Anchor/Gavom at 25½d.

Brisbane.

No sales are being held in March, but it is expected this centre will open the northern centre's April programme.

Results of the February sale included, in the grease, Eveleigh 28d., AHD/Melva 27d., Glenlyon and Isis Downs 25d., and in scoureds, Afton Downs 48½d.

Adelaide.

February series covered 10,000 bales, of which some 8300 were sold, Yorkshire operators securing the largest proportion, fine wools being again in demand, withdrawals being mostly broad haired parcels, which are out of favour.

Top price of the day was secured by the Kulnine clip at 20d.

The March series comprised 17,000 bales, and in view of the fall in prices in London, the market was disorganised, only some 30 per cent. being disposed of in the saleroom. Under such conditions it is practically impossible to quote rates, but it may be accepted that those lots sold showed a full 25 per cent. drop on February prices.

Of the sales made, Kadlunga at 19½d. for the AA was top price.

The N.Z. Wool Position.

The Prime Minister of New Zealand, who will shortly be leaving for England, has promised to look into the wool position while there. He stated recently that he was not altogether in favour of transferring the New Zealand surplus in England to the Anglo-Australian organisation for realisation—he would have more confidence if it was a New Zealand concern. Not sufficient attention had been given to another point. Sir Arthur Goldfinch had informed him that the accumulated wool in stock had cost the Imperial authorities £22,000,000, and the accumulated profits would be between £7,000,000 and £8,000,000, but if the wool was sold on the Australian average there might not be any profit for New Zealand. Some time previously he had made arrangements with Mr. Matthew Weir (now Lord Inverforth) as to the

disposal of the surplus wool, and if possible he would see the latter gentleman on the matter when he returned to England.

New Zealand Sales.

The sales held in New Zealand during the month gradually went from bad to worse, and finally it was decided to hold over the sale fixed for Dunedin. The Americans are now apparently out of the market, and consequently there is little more demand for fine wools than for coarser wools. At the last Christchurch sale, where there was a considerable drop from the January sale, the principal buyers were local woollen mill representatives, a French buyer, and a few local fellmongers.

There were 20,692 bales offered at the Christchurch sale, and the following was the range of prices and a comparison with the January sale:—

	February.		January.	
	d.	d.	d.	d.
Super Merino	14½	—20	17	—23½
Medium Merino	12	—14	14	—16½
Super halfbred	12¾	—15½	14½	—17½
Medium halfbred	9½	—12	10½	—13
Inferior halfbred	7	—9	7¾	—9¾
Super threequarter-bred ..	7	—9¾	10½	—15½
Medium threequarter-bred ..	5	—6½	7	—8
Inferior threequarter-bred ..	4	—5½	5½	—6½
Super crossbred	7½	—10	7½	—11
Medium crossbred	5½	—7¼	5	—6¼
Inferior crossbred	3½	—4½	3¾	—4¾
Best halfbred pieces	9	—12¾	10	—13½
Medium halfbred pieces	6	—8	8	—9
Crossbred pieces	4¾	—5¾	—	—
Locks	2	—2½	2½	—4¼

AUSTRALIAN WOOL EXPORTS.

From 1st July, 1920, to 28th February, 1921.

Compared with corresponding period last year.

July 1, 1920—Feb. 28, 1921.

	Season		1920-21.		Increase.	Decrease.
	1919-20.	Bales.	1919-20.	Bales.		
New South Wales	703,456	414,606	290,547	—	—	123,959
Victoria	533,604	339,470	249,272	—	—	90,198
Queensland	353,964	221,661	189,716	—	—	31,945
South Australia	195,865	117,924	98,940	—	—	18,984
West Australia	160,550	60,422	50,201	—	—	10,221
Tasmania	30,247	15,916	3,605	—	—	12,311
	1,977,686	1,169,999	882,381	—	—	287,618
	Net Decrease, 287,618 bales.					

Considerable quantities of wool grown in some States are shipped from others, therefore the above figures do not show actual production of each State, but the total overseas shipments.

New Zealand Exports from 1st July, 1920, to 31st January, 1921, 238,243 Bales. Figures for the same period 1919-20 were 305,810 Bales.

WOOL ARRIVALS AT SEABOARD IN AUSTRALIA.

From 1st July, 1920, to latest dates.

State.	Date.	Bales.	Bales.
New South Wales	3rd March, 1921	—	531,801
Victoria	5th March, 1921	—	275,834
Queensland	23rd Jan., 1921	—	—
Townsville	—	61,428	—
Rockhampton	—	31,090	—
Brisbane	—	192,037	—
		—	214,556
South Australia	26th Feb. 1921	—	—
Port Adelaide	—	111,047	—
Other ports	—	20,286	—
		—	131,983
West Australia	14th Feb., 1921	—	—
Fremantle and Albany	—	31,463	—
Geraldton	—	15,397	—
		—	46,860
			1,200,333

Canadian Wool Market.

The Canadian Department of Agriculture advises under date 6th January:—

"The Canadian trade in wools continues quiet. A number of mills have been shut down pending a change in the situation. Mills that are now in the market for supplies are buying very cautiously, as they have only a few new orders to fill.

"Sales of medium clothing are reported as being made at 17½d., low medium combing at 12½d., and black and grey at 9d.

Wool Situation in U.S.A.

SALT LAKE CITY, UTAH, U.S.A., 1st January, 1921.

Since our letter of two months ago the outstanding features of the wool situation in this country have been the rally in the market from the drab depression that continued for months, and the drive on Congress for legislation on behalf of the woolgrowers. Before Thanksgiving the wool market had been depressed so long, and "deadness" had become so pronounced that it was thought it could not possibly become worse. However, between Thanksgiving and Christmas the slump intensified; at little buying there had been during the previous lagging weeks stopped altogether, and prices went down to lower levels. At this the weary and disheartened dealers and growers, with large stocks of wool out on consignment, thought the last stage of their melancholy experience had been reached.

Special apprehension was felt because prices offered for that little wool could hope to be moved were as low, and in some instances lower, than the advances made in the spring and early summer, when the wool was consigned. It will be remembered that these advances at that time were very disappointing to the growers in most cases. Stockmasters, who had confidently counted on wool being worth four shillings a pound in the grease, were compelled, never much they disliked it, to accept advances around 12½d. a pound. Earlier in the season, when the market was stronger, some advances as high as 20d. had been paid. Now, it can readily be seen that on such a market as has prevailed during the past few months, there is grave danger for the grower. Advances of 12½d. and even mean that the consignees cannot get out whole, except for unusually fine grades of wool. And some of the best wool has been around 15d. a pound in the grease. Dealers report that the cost of handling wool is 3d. to 3½d. a pound, so that wools sold at 15d. must have been taken at advances of less than 12½d. to show a margin of safety to the consignees. Even in normal times it is difficult to get a refund on all or part of the money advanced on consignments; this year, with financial conditions what they are, it would be impossible. Most of the growers are so involved with their local banks now that to get more loans to meet a deficit on wool already shipped would be out of the question. Therefore, bankruptcy faced many of the growers, and fear was widespread.

Christmas week brought a Santa Claus gift to the wool trade in the form of a rally from the gloomy depression. It did not actually amount to a great deal, and under normal conditions would not have been noticed. But any change was for the better, and the fact that the trend turned upwards again brought a wave of encouragement. Confidence revived, and it is felt now that the worst has been passed. Of course, it is difficult to tell just what may be in store, for the recovery noted in the market may be only a reflection of the activity started in Congress on behalf of the wool men. And this activity may or may not amount to a great deal. It already has been demonstrated that the democrats in Congress will not permit tariff legislation to pass without a hard fight, and they may be able to muster enough strength to demand important concessions and compromises from the protectionists.

Members of the trade in Boston have hesitated to put into figures the actual advances made in quotations during the recent rally, although some others have said it is between 10d. and 5d. a pound scoured. Many of the deals have been more or less confidential and secret, and the published quotations are understood to be only an approximation of

the real situation. However, it is known that more wool is moving, and that offers which ten days previously would have been eagerly seized by the dealers have since that time been rejected. It is known that a few manufacturers at least have discovered that their purchases cost them considerably more than they would have done a week before.

In spite of the curtailment in many of the clothing mills during the past month or so, it is generally understood that the reserve supply of wool which has been taking care of the manufacturers is about exhausted, and it is believed that as soon as operations at the mills live up a little the manufacturers will have to go into the market for more of the raw product. The strike of the purchasing public against high prices of clothing can not last much longer, it is thought, and confidence is expressed that within a short time business will be humming again. Slashing sales among the clothing retailers all over the country during the past two months are to be followed by still more clearance sales before the annual inventories are taken, and all this stimulation of buying cannot help being reflected in an important way throughout the entire wool market.

Our English Wool Letter.

(Specially written for "The Pastoral Review.")

LONDON, 20th January, 1921.

How the Trade Views the New Realisation Scheme.

The past month has shown no marked improvement in the wool trade, and although the turn of the year has come, nothing outstanding can be chronicled. Of course, the chief event is the introduction of the British-Australian wool realisation scheme, this having received the sanction of the British Government. It cannot be said that the trade feels quite satisfied with what has transpired, but all the same if the scheme benefits both growers and users, no one will grumble. Everybody recognises that the 2,000,000 bales of old wool will have to be got rid of somehow, and if the directors of the new scheme can find ways and means of getting rid of the same without inflicting injury upon anyone, there will be real cause for satisfaction. We believe those representing growers' interests are sympathetically disposed towards users, and no doubt it would be a good thing if a big weight of this old wool could be got into the hands of users in Continental countries even on terms of deferred payment. All the same, it is recognised that it is a real menace to the successful marketing of the current new clip.

Safeguards.

When the scheme became known the British Wool Federation, which represents users in the West Riding, and is a powerful organisation, got together, and after a deputation had waited upon Sir Arthur Goldfinch, they passed a resolution supporting the scheme. They were frankly told it had to go through, but certain safeguards were promised, which if honoured will make the scheme all right. Last week an official statement was issued giving details of the arrangements made with the Australian Government and the names of those constituting the directorate. The chief safeguards for the consuming end of the trade were that reserve prices for the old wool would be brought down to a world parity, the London auctions would continue as usual, and the British Government reserved to themselves the power to abandon the scheme if anything transpired contrary to the usages of the

QUIBELL'S Improved Powder Sheep Dip
GIVES THE BEST RESULTS.

wool trade in general. The trade feels amply provided for, but the question is, will the various conditions be honoured? Since the pledges were given a series of colonial wool sales began in Coleman-street, at which it was expected that Government reserves would be reduced to a market level. At the first sitting there was a "scene." Sir Wm. P. Raynor, of Huddersfield, chairman of the Colonial Wool Buyers' Association, made a strong protest, characterising the auctions as a farce, with which everyone agreed. Since then not more than 20 per cent. of the offerings have been sold when Government wool has been catalogued. There have been two "free" sales at which wool has been offered (10,000 bales each time) on growers' account, and at least 80 per cent. of the offerings have been sold. This makes a very big difference, and certainly demonstrates the fact that when wool is offered at a market price the trade is prepared to buy. Last Saturday the British Wool Federation held a meeting at which a protest was made against the present high Government reserves. A deputation was instructed to wait upon the board to present a complaint. If the Government reserves had been reduced there would certainly have been a more kindly feeling towards the new scheme.

Trade Demands.

It does seem a pity that at a time when there is a need for unity between the growing and using ends of the industry, the attitude of the British Government in regard to their old clip should be so unsatisfactory from a trade standpoint. Everybody is willing to buy to the best of their ability, but unwilling to pay sensibly more than wool can be bought at anywhere in Australia. Both South Africa and South America are clamouring for as much support as possible, but users fail to see why 15 per cent. more than the ruling market price should be demanded for old wool. If it is the intention of the wool realisation scheme directorate that reserves be maintained in Coleman-street in order to compel users to transfer their buying power to Australia nobody knows what will happen, but users say it will not come off. Of course, it is realised by buyers in London that growers cannot care one jot or tittle about the old wool because they have nothing at stake except an extra profit on what they have been paid already. It certainly is a menace to the new clip; it cannot be otherwise, but all the same the old wool cannot be eaten; it will not be burnt, but must ultimately come to combs and spindles, and if it is the intention to take off the market the old clip let the committee be frank enough to say so, when buyers will know what to do.

The Sales.

Government wool has been limited so high in London that if sold at the reserve price asked a spinner's 70's warp top would cost 7s.; warp 64's, 6s.; and warp 60's super, with part 64's, 5s. A few lots of Continental style Brisbane 70's pieces have been sold to French buyers on a basis of 38d. clean London, which means 4s. 4d. in the top in Bradford. Bearing in mind these prices, it is significant to know that importing topmakers are to-day offering in Bradford warp 64's for delivery early in June at 4s., and they say frankly that they have bought wool in Australia to bring in tops at that price. The writer has this information first hand from a spinner who, since the auctions opened, has had £50,000 credit in Sydney, and operated at the last two Australian sales. Nobody can understand why there should be this disparity in prices between the two countries, and they fail to see why wool should be sold freely in Australia at sensibly lower limits than those asked for old wool in Coleman-street.

New Zealand greasy crossbreds, mostly carding sorts, have been withdrawn owing to reserves being at 12d. to 13d. for greasy 46-48's wools. Cable information has been received from Napier that 48's fleece wool can be bought at 14½d. c.i.f. London, whilst at the Christchurch sale of 15th January a limit of 15½d. was asked. The reader will see in these figures evidence of solid ground for complaint by users. Twelve months Cape combing Merino wool has been offered at 34d. clean c.i.f. London, and big weights of B.A. 40's crossbred combing wool have been sold at 10d. clean c.i.f. Liverpool. These facts are simply mentioned to give readers an accurate idea of what is proceeding in other wool markets. We certainly think that values in New Zealand are most

reasonable for crossbreds, and there can be no reason for growers wanting prices which are not conducive to good business. In other words, it is not the price of wool which is preventing trade development, but the cost of turning it into the fully manufactured article.

How Values Have Fallen.

For many years it has been the writer's custom at the opening of a new year to try to scan the horizon in the hope of indicating what is likely to happen in the interests of growers. We must admit that to-day everything is very uncertain. The entire trade has just come through the worst year ever known. The results are tragic, the manager of one of the leading banks in Bradford asserting last week that any firm who has the same amount of capital as in 1914 is to be congratulated. We wonder if readers have any clear conception of the slump which has occurred. As indicating the unparalleled nature of the rise and fall in values, we cannot do better than give a few typical examples, and in the following table we show the changes in home-grown wools, colonial tops, and yarns at the end of the year as compared with prices ruling at the beginning of January, the April quotations being introduced to show the highest points touched:—

British Wools.

	Jan. per lb.	April. per lb.	Dec. per lb.
	d.	d.	d.
Lincoln hogs	28	28	14
Lincoln wethers	27	27	12
Irish hogs, selected	34	33½	15
Irish wethers, selected	34	33	14
Selected Kent tegs	46	46	19
Selected Kent wethers	40	40	16
Cheviot hogs, super	48	50	30
Cheviot wethers, super	48	50	28
Pick Shropshire hog	54	60	36
Pick Shropshire wether	54	60	36
Welsh fleeces, selected	37	38	20
Scotch blackfaced ewe and wether	20	21	9½

Colonial Tops.

	Jan. per lb.	April. per lb.	Dec. per lb.
	d.	d.	d.
70's warp	162	178	63
64's average	144	166	48
56's average	100	100	32
50's average	74	74	26
46's carded	47	46	19
40's prepared	38	39	17

Yarns.

	Jan. per lb.	April. per lb.	Dec. per lb.
	s. d.	s. d.	s. d.
1-30's demi lustre, 40-44's English	7 3	7 9	5 9
2-24's 48's carded	8 3	8 9	4 7
2-24's 60's white	14 4	17 0	6 0
2-24's 64's white	16 6	18 9	6 3
2-48's 70's white	18 6	22 0	7 0
3-12's 40's Colonial	6 3	5 11	3 5
3-12's 50's Colonial	9 6	9 9	4 10

The Outlook.

The year has opened with nothing at all auspicious in connection with the trade. Business is practically at a standstill. Mills are perhaps not running any fewer hours than a month ago, but when the majority are only working from 18 to 25 hours weekly, the reader will see that there is nothing good appertaining to the trade. The general impression prevails that the worst is past, though it is not the view of everyone. The principal of a large Australian wool importing house in London remarked last week that we should see still lower wool prices, but it is to be hoped not. Good combing Merinos are still sensibly above appraisement prices, it being really the crossbred end of the trade about which there is the most concern. What else can be expected? Growers seem to be in for a hard time, for if trade revived it would be for fine crossbreds and Merinos, chiefly the latter. But then, as already said, it is not the price of wool which is standing in the way of a trade revival, but the high costs of turning same into the fully finished fabric. There

In addition to the exploratory commission that was despatched to Germany some little time ago for the purpose of ascertaining what prospects there were in Germany for a market for South African wool on a basis of credit backed by the funds in the hands of the Custodian of Enemy Property or by system of barter, another scheme similar in nature and principle has been mooted in the Union. A very large sum, running into some hundreds of thousands of pounds accruing as profits to German shareholders in the diamond mining companies of South-West Africa is also in the hands of the Custodian to be retained for a good many

Ship.	Destination.	Date of Departure from last Aust. Port of Calling.	Shipped from--						Arrived at Port of Destination.		Afloat. Bales
			N.S.W. Bales.	Vict Bales.	Q'land. Bales.	S. Aust. Bales.	W. Aust. Bales.	1 as. Bales.	Date.	Bales.	
Light Companion	London	Nov. 6, 1920		6,637		5,547			Jan. 10	12,184	
Polk	Boston and New York	" 6 "	1,406	5,086					Feb. 5	6,492	
Berty	New York	" 22 "		1,480					" 15	1,480	
Grey	United Kingdom	Dec. 1 "	414		4,698				" 13	5,112	
St Chalmers	"	" 2 "	400		7,697						8,097
St Napier	London	" 2 "	9,859						Feb. 17	9,859	
Shire	"	" 3 "	2,195						" 10	2,195	
Essea	United Kingdom	" 3 "		3,484	4,421	1,688			" 19	9,593	
Land	New York	" 7 "		734	2,741				" 28	3,475	
Centaria	United Kingdom	" 9 "	2,721		526				" 21	3,247	
Field	Continent	" 10 "		3,039	9,449	5,146			" 13	17,634	
ncallere	"	" 23 "	4,950	7,405		1,302			" 6	13,657	
y of Edinburgh	United Kingdom	" 24 "		2,452		11,622					14,074
ma	London and Continent	" 24 "	98		13,536						13,634
Maru	Yokohama	" 31 "		340	1,498				Feb. 4	1,836	
ngarra	London and Continent	" 31 "	1,173	809	3,187		490		" 27	5,659	
oral	United Kingdom	Jan. 1, 1921	202	4,373	1,966	3,640			Feb. 6	3,873	10,161
leto	London	" 4 "	1,581	84	1,459		249		" 6	3,17	
la	U.K. and Continent	" 6 "					317		" 21	317	7,147
tralbrook	London	" 7 "	1,090	6,057							
tor	United Kingdom	" 12 "		2,020	5,628	372			Feb. 26	8,020	
athon	London	" 14 "	292	692	3,479		2,579		" 20	7,012	
aren	Continent	" 14 "	9,358	2,176		712					12,246
ea	London	" 14 "		271		289			Feb. 20	550	
of Newcastle	United Kingdom	" 15 "		4,416	3,270		760				8,446
ersset	"	" 16 "	435	1,521							1,956
y of Madrid	"	" 17 "					648				1,956
atay	Boston and New York	" 17 "			178						5,801
Albury	New York	" 22 "	3,100	2,523							4,366
alla	London	" 25 "	375		3,991						2,121
go Maru	"	" 31 "	1,137	984							1,011
ova	Yokohama	" 31 "			1,011						2,372
stmoreland	London	Feb. 1 "		187	1,862		323				4,849
Adelaide	United Kingdom	" 1 "		4,849							516
deroo	"	" 2 "	117	429							1,402
ina	Singapore	" 3 "				67	1,402				1,90
orata	London and Continent	" 4 "	280	143							1,770
zilia	London	" 4 "			1,770						9,899
akawa	London and Continent	" 5 "			9,899						1,156
amic	San Frisco and Vancouver	" 9 "		1,156		1,364					7,850
as	United Kingdom	" 9 "	4,268	1,713							5,803
dera	"	" 10 "		721	5,082						2,154
Lyttleton	London	" 11 "		1,104		1,050					3,898
omonwealth	"	" 11 "			3,898						1,083
us	"	" 12 "	522	451			110				62
adian Prospector	Singapore	" 13 "		62							19,129
ylshire	Seattle and Vancouver	" 15 "	393	18,736							6,797
ron	U.K. and Continent	" 18 "	2,881		1,572	2,34					

years to come, but on which interest is allowed in the meantime. The proposal is that this sum should be funded, applied to the purchase of South African wool, and realised on account of the said shareholders, who in all probability would see a speedier return of capital and an enhanced return on the investment than is likely to result under the other circumstances mentioned. It has been stated that these shareholders regard the scheme with a good deal of approval, but no definite announcement has been forthcoming since the scheme was mooted as to whether it is likely to take practical shape or not.

Aspirants to German favours for the purchase of the wool clips of the world seem so numerous that it would seem as if that country will be placed in the position of picking and choosing, and of being able to make a better deal than countries which have full and unfettered access to the open markets. There is something very ironical in the whole situation.

"Black" Disease in Sheep.

Dr. Sydney Dodd, D.V.Sc., F.R.C.V.S., lecturer in Veterinary Pathology and Bacteriology at Sydney University, announced last month the discovery of the organism which causes "black" disease in sheep. This trouble has created heavy losses in New South Wales, particularly in parts of the southern highlands, and up to the time of Dr. Dodd's discovery, the fruit of six years' close study, has always been more or less a mystery.

That "black" disease is caused by one of the largest sporing bacilli is the conclusion he has arrived at, and the causal agent thus being identified, Dr. Dodd had next to ascertain the natural method of infection. It must be recalled that the disease is seasonal, the vast majority of cases occurring from the late summer to early winter. On infected properties sheep grazing in paddocks well watered by springs, but in which the ground is not well drained, and which contain swampy areas are subject to a heavy mortality from "black" disease, except in seasons of unusual dryness, when the worst places have dried up. Sheep kept in paddocks having water from the same sources running through them, but where the ground is naturally well drained, show few or no losses. In infected paddocks that have been artificially drained the mortality has been considerably diminished. In a very dry season, such as that of 1918-19, the deaths in paddocks known to be heavily infected were unusually light. Owing to the fact that fluke disease is very common among all sheep in the area in which "black" disease is known to occur, some sheep owners have been led to think that the latter is nothing else than acute fluke disease of the liver. But that this is not the case is shown by the fact that fluke disease is common in numerous parts of the State and elsewhere, but "black" disease, or anything resembling it, is unknown in many such places.

After excluding as impossible or highly improbable various suggested means of natural infection (food and water, access through the skin, inhalation, &c.), Dr. Dodd has come to the conclusion, after weighing all the arguments, that the solution of the problem of the natural method of infection and the situation of the primary lesion is to be found in the liver fluke. As he says, "If the feasibility of such a hypothesis be accepted, then almost all of the features concerning the transmission of 'black' disease become fairly clear." This conclusion has led to the advice given by Dr. Dodd that if owners will get rid of the liver fluke they need not trouble much about "black" disease. He does not suggest that every fluke is a carrier of infection, though it is a potential one.

After determining the causal agent an endeavour was made to devise a method of prevention of the disease. Considerable success was obtained in a small experiment in preventive inoculation, and this led to a larger test in the field. During the seasons 1918-19 and 1919-20, between 5000 and 6000 sheep were vaccinated, at such a period as would permit immunity to be fully established before the onset of "black" disease. Control sheep were used, and all placed in notoriously infected paddocks, where the annual loss for years had been from 20 to 30 per cent. It was found,

however, during both seasons, that the mortality from all causes was not more than 2.5 per cent., and there was the same low percentage of deaths in the controls as in the vaccinated animals. Dr. Dodd attributes the great drop in the incidence of the disease in this case to the fact that the owner during the summer preceding the vaccination had thoroughly drained the swampy places, so that the water from the springs could readily get away, and consequently the carriers of the disease had disappeared to a great extent. Doubtless, Dr. Dodd will devote himself to further work in devising methods of immunisation where the obvious measures of draining the swampy areas are impossible.

The Digger Wasp.

An Enemy of the Blowfly.

We do not place a great amount of faith in so-called "natural enemies" of the blowfly, as experience has shown some of them to be least active when they are most wanted, and up to date, although it may still be early to judge, they do not appear to have caused much inconvenience to the flies. However, some tiger of a parasite may be discovered which will administer a knock-out blow to the pest.

It is interesting to note in an issue of "The Times" weekly edition as far back as May last year, illustrations of the small British digger wasp, which bears considerable resemblance to our friend, the chalcid. It is stated that it "is less than half an inch long, and wages unceasing war on blue bottles. It bores 20 or more tubes in decaying wood, lays an egg in each, provisions each with four or five blue bottles for its grub to feed on when hatched, and seals up the whole with a plug of sawdust."



THE DIGGER WASP.

A correspondent, writing to us from the Goodooga district, N.S.W., close to the Queensland border, regarding this wasp, says:—"We have several like him up here; one they call the 'policeman' fly, which goes for the little fly. Saw them here in hundreds just before Christmas, and since then hardly a fly to be seen. They used to rest on your back when riding, and if interfered with would sting. I heard it said in the district that they killed blowflies as well, but cannot say I saw them at it, though when crutching maggoty sheep at the yards, they were in hundreds. We have a couple of other sorts of wasps here, like the one in the illustration, and they disappear into little holes in the wood, and fill up the hole with mud. They also seem to be fly killers."

Australia's Largest Station.

Victoria River Downs, N.T.

In answer to a correspondent from North Queensland we have pleasure in informing him that notwithstanding what other papers may have published, the area of Victoria River Downs, N.T., is 11,561 square miles, all connected and under the one manager, and made up of ten leases and two permits. The owners of the property have supplied us with the exact figures for each lease, and we hold their signature as to the accuracy of same.

The areas for each block are as follows:—Block 2184, 8746 miles; block 2158, 336 miles; block 2182, 147 miles; block 2157, 96 miles; block 253 (permit), 83 miles; block 279 (permit), 98 miles; block 2183, 240 miles; block 2174, 327 miles; block 2159, 249 miles; block 2175, 388 miles; block 2180, 353 miles; block 2181, 498 miles. Total, 11,561 square miles.



Top Market Values for Wool

This is the function of Winchcombe, Carson's business as selling brokers. And that object is kept constantly in view.

Demand this season is limited. It is difficult to say when the whole of this year's clip is likely to be cleared up. But perseverance will eventually achieve that end.

Meanwhile the sheepowner's safest step is to place his wool in the hands of capable salesmen. Men in whom he can place complete confidence—sure of their judgment and capability. The wool market has been uncertain before. With care and skill, however, the difficulties have been overcome.

Consign Wool :—

Winchcombe, Carson Ltd.,
Sydney OR Brisbane

SALT and the BLOWFLY

H. H. Wettenthal, of Carr's Plains, via Stawell, Victoria, in "The Pastoral Review," February, 1921, issue, writes :—"Re an interesting letter in your January number on the above, I feel convinced it applies to a great degree here. It prevents, through bringing about better digestion, the blowfly attack. Where salt was not kept up to the sheep, the fly was at work immediately this good year, other years not so pronounced."

The **MEDICATED LICK** is to prevent worms, fluke, &c., and keep the sheep healthy, build large frames. Internal health means robust wool, no parasitic skin troubles to attract the blowfly. **CRUTCH WOOL SATURATED WITH URINE FROM WORMY SHEEP IS THE BEST BREEDING GROUND FOR THE BLOWFLY POSSIBLE TO GET.** This lick won't prevent the blowfly trouble, but it will by its internal effects render sheep much less liable to attract the fly, as naturally the animals' internal conditions affect the urine and other fly attractors.

It SAVES SALT, as only a very limited quantity can be eaten by stock at a time

For the simple reason that the medicants and ingredients satisfy their cravings quickly, and it does not include any "sweet attractions" such as Molasses to attract sheep to eat it. The object of a true medicated lick is not to give them a daily feed of lick to live upon, as it costs money, but for them to have their daily feed of grass which costs nothing. The lick prevents the many troubles that are now so prevalent with sheep, caused by blowfly, tick, worms, &c.

BONE CHEWING is very prevalent in Gippsland and parts of N.S.W. The cause is want of Phosphates. The remedy is 2 ozs. Medicated Salt Lick daily in food, or the Lick placed so that stock can get very free access to it. **LICKS** must contain a big percentage of Bonemeal to be of any use. Carter's contains a minimum of one-tenth Bone meal. This Lick prevents **Malformation in Young Stock.**

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ORIGINAL MEDICATED SALT LICK - - £9/17/6 ton f.o.r. Sydney.**

Price f.o.r. ALBURY is £10/15/- ton or f.o.r. MELBOURNE £10/15/- ton.

Put back into the Original Salt Bags after mixing to save cost of new bags. If packed in new bags 20/- ton extra.

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The Gladstone Meat Works of
Queensland Ltd., Gladstone,
Queensland.
BUYERS OF FAT STOCK FOR EXPORT.

Meat and Produce Trades.

Position and Prospects in Australia.

The Season.

Considerable rains have fallen over the main pastoral areas of the Commonwealth since last writing. While always welcome in the north, these are a little early for the southern districts, where there is a risk that they may do more harm than good. The trouble is that a downpour at this time, besides lessening the value of dry feed in the paddock, causes grass seeds to germinate, and the growth, if followed by a hot spell, is liable to be scorched, leaving nothing for the winter. However, so far the weather has kept mild and showery, and everything is all right. Evidently graziers have confidence in the future of the season as they are buying sheep and lambs more freely on the Melbourne and Adelaide markets than a month ago, and values have firmed. The Sydney market is fluctuating. Last week, on 3rd March, lambs and hoggets were up 3s. to 4s. a head, but this week they have dropped nearly the same extent.

The first of the individual State live stock returns, taken up to the end of the year, have just appeared. They relate to New South Wales, being preliminary estimates prepared by the Stock Branch of the Department of Agriculture, and, as such, are subject to some revision later. Remembering the bad season experienced the first half of 1920, a decrease in sheep numbers is only to be expected. It comes as rather a surprise, though, to hear that cattle have increased. The figures for 31st December, 1920, are:—Sheep, 29,901,701; cattle, 2,854,877; representing a drop in sheep numbers of 3,563,833, and an increase in cattle of 2830 head, as compared with the final returns for 1919. It is explained that the decrease in sheep was only half what it was expected to be early in the year, due mainly to the good lambing in many parts, and stock brought in from other States. The increase in cattle is ascribed to interstate introductions following the drought.

Current Operations.

Apart from some of the New South Wales works, which are killing on a small scale, the trade is very quiet in the southern States. As long as local values for stock remain high, and the Home market weak, the chance of exporters being able to operate is remote. Nobody can say how long these conditions are likely to last, but at the moment it looks as if little or nothing would be done until the spring lambs are available, i.e., September or October. There should then be a surplus available for export.

Practically all the works in central and south Queensland are now in commission, although none are working with full boards. Cattle values are fairly firm, at all events firmer than frozen beef at Smithfield, and it is uncertain how long shippers will continue to operate. In any case, the killing season in the south is likely to be only a short one. The strong demand in New South Wales has led to a considerable transference of stock to that State, which under ordinary conditions would have gone through the Brisbane works. The northern works open next month, and a good run is anticipated. It is said that the northern companies are offering 27s. 6d. per 100 lbs. for cattle this season, except for very prime, as compared with 38s. to 40s. paid last year. A suggestion has been made that treatment on behalf of owners should be re-instituted at the works.

Negotiations are still proceeding between the Queensland Government and the export companies regarding supplies for the State butchers' shops. It is reported that the Government is seeking similar terms to those which applied last year, viz., 20 per cent. of the total cattle, and 15 of the sheep killings at all works, the price being 3d. per lb. for fresh, and 3½d. for frozen beef, and 4½d. for mutton. Protests against the proposed commandeering continue to be sent in by public bodies. They may not have much influence on the position this year, but may give the Government cause to consider its future actions. The following resolution, from

the Townsville Chamber of Commerce, is a fair sample of how the commandeering is viewed outside the trade:—

"This chamber takes strong exception to a renewal of the agreement by the State Government with the several meat companies whereby it commandeers some 20,000 tons of beef annually, at a price substantially below the fair market value, and thereby seriously handicaps and injures the small producer. This action creates an artificial position, is an injustice to the man on the land, and militates against private enterprise."

Clearances of frozen meat from the Commonwealth to all oversea ports last month were on a moderate scale. They totalled 37,384 carcasses mutton, 111,080 carcasses lamb, and 145,716 quarters beef, of which all but 7420 sheep, 2027 lambs, and 4942 quarters beef were consigned to Great Britain. A fair quantity of beef may be got away from Queensland this month, but otherwise March shipments will be small.

Freight Rates.

The trade has been advised that the freight on free frozen meat to Great Britain, March-April shipments, is to be:—Beef, equal hind fores, 11s. 16d.; ditto equal hind crops, 1½d.; lamb, 2s. 5-16d.; mutton, 2½d. per lb. net. Previously the charge was 1½d. for beef, 2d. for lamb, and 1½d. for mutton, all plus 10 per cent., so the new rate represents a decrease on beef of .05d. per lb., and an increase in lamb and mutton of ½d. and 1-16d. per lb. respectively. The why and wherefore of the increase is difficult to understand. Some six weeks ago the Prime Minister for New Zealand announced that as a result of negotiations he had succeeded in obtaining a reduction, as far as New Zealand was concerned, of 5 per cent. in the charge. This news was cabled to Australia, where shippers promptly made application to the Shipping Committee for a similar reduction. The reply has been the above-mentioned advance in lamb and mutton rates, and it transpires that the promised reduction in New Zealand has been converted into a somewhat similar increase.

Assumably, the responsibility for increasing the charges rests with the Imperial Government Shipping Committee. The control over refrigerated freight remains in force until 30th April, after which date the shipping companies will be free to make their own arrangements with exporters. However, the fact that rates have been raised just two months before the control terminates does not argue for a cheap freight. Necessarily, whatever the charge, it will be passed on to the producer. The exporter when buying takes freight to London into consideration, and it simply means that he will pay so much less per head if the present abnormal rates are maintained. An ½d. per lb. may not sound much, but when charged on the aggregate weight of, say, 500 lambs, it runs into a fair sum.

Trade with the Continent.

The British Chamber of Commerce in Paris has forwarded a copy of the new regulations governing the introduction of frozen meat into France and Algeria. These stipulate that the importation of meat preserved by frigorific process is subject to an authorisation delivered by the Minister of Finance, on the approval of the Under-Secretary of State for Food, and a special commission to be nominated by the latter. Applications for authority to import must indicate the nature and category of the meat to be imported; the origin, the country from which the goods are despatched, and the date of slaughter; the exact weight of the meat to be imported; the name of the ports of loading and unloading, and the maximum price c.i.f., or ex bonded warehouse at which the goods will be offered or sold in France. The Under-Secretary of State for Food, in agreement with the commission abovementioned, will fix every fortnight, and per category of meat, the maximum wholesale price, in accordance with which the maximum retail prices will be established in the departments by the prefects.

Position and Prospects in Great Britain.

Our usual London letter is unfortunately not to hand owing to delayed oversea mail and floods on the trans-Australian railway. The mails are still most erratic, there having been a gap of nearly three weeks since the arrival of the last from London, while no less than four are due to arrive in the next three weeks.

The American Meat Companies.

Interim Report of British Government Committee.

The text of the "Interim Report on Meat, Prepared by a Sub-Committee appointed by the Standing Committee on Trusts" is to hand from London, and from it we quote the following findings and recommendations:—

British and Colonial Meat.

There is no evidence of the existence of either temporary or permanent combinations in the home-grown meat trade or the trade in imported meat from the Dominions, which did or could exert any seriously detrimental effect on traders or on consumers.

Speculation in meat is unorganised, occurring only in particular condition of supply, and is not characteristic of the meat trade as a whole.

American Meat Companies.

There is at least a tacit understanding between the American meat companies to respect each other's position, which secures to them all the economic advantages of an active combination, and all questions affecting the strategy of the trade as a whole are settled in conference between the heads of the businesses in Chicago.

The share of British trade held by the American companies has increased, and this development requires to be carefully watched, although there are no signs at present of a serious intention on the part of the American companies to capture the home-killed trade of the United Kingdom or to reduce British butchers to a state of dependence.

For a long time we must be dependent on South America for a great part of our beef supply.

The American meat companies have at present nearly 60 per cent. of the beef output from Argentina and Uruguay, and about 75 per cent. of the capacity of the meat works built or building in Brazil, whereas in 1909 they had only about 35 per cent. of the River Plate meat trade.

The growth of the American companies has been largely brought about by the destructive competition which from time to time they have waged against the British meat companies, with the result that the latter were forced in June 1914 to consent to a pooling agreement determining the share of the trade to be apportioned to each company.

The policy of the American companies is to-day the same as it has been since their entry into the River Plate trade, namely, the continued reduction of the share of the trade held by British companies, and this policy involves the risk of grave dangers to the British consumer.

The British registered company of Vestey Brothers is controlled by English owners resident abroad, but it has at present no connection with the American meat companies; the combination of interests represented is so large that if the company departed from its policy of independence the consequences might be very serious.

We recommend, therefore:—

1. That it should be the declared policy of His Majesty's Government to prevent the percentage of the beef trade which is at present in foreign hands from increasing to the loss of producers at home and in the Dominions and of British importing companies.
2. That in any legislation which may be contemplated for the purpose of dealing with trusts and combinations there should be provisions for dealing with the form of co-operation, which we believe to exist among the American meat companies, and for the investigation of complaints against these companies, and that the utmost publicity be given to their methods of business.
3. That steps be taken to ensure that foreign meat companies should be subject to the same basis of taxation in this country as the British meat companies.
4. That the Las Palmas meat works in Argentina should continue to be operated on behalf of His Majesty's Government so as to afford a means of watching the developments of cost and price movements.
5. That the control of insulated shipping would afford one effective means of preventing British meat supplies from falling under the domination of particular interests, and that, accordingly, the Government should be equipped with such reserve powers, and should maintain such relations with the shipowners, as would prevent the diversion of meat supplies from the United Kingdom and the wholesale transfer of British insulated shipping to foreign ownership.
6. That the Governments of the various consuming and producing countries should discuss together the possibilities of making joint investigation into the world's meat situation with the object of taking such common action as may be required.

The report states that the American companies have now 34 stalls in Smithfield market, as against 20 in 1908. About

half their trade is, nevertheless, according to the information given to the committee, still done through jobbers.

The danger spot is considered by the committee to be the Argentine, where the Americans have 60 per cent. of the beef output, and regarding this appears the following significant paragraph:—

"It would not be expedient to discuss here in detail measures which might be applied under particular circumstances, but if the general line of policy suggested above be steadfastly pursued it will be the less difficult to decide at the appropriate time on any special course of action. In fact, if foreign interests were convinced that His Majesty's Government were resolved that the share of the beef trade which is at present in foreign hands should not be increased to the loss of producers at home and in the Dominions and of British importing companies, they would not be disposed to incur the heavy losses which aggressive action on their part would entail, and the risks of aggression would disappear."

The London Market.

Defeating the Control.

Private trade advices received by mail from London tell of the methods adopted by a few unscrupulous traders to obtain prices over and above the maximum fixed by the Food Controller for frozen lamb. About the middle of January there was a great scarcity of lambs, and the demand was used by these gentry as a lever for extracting a premium over the 8s. 8d. per stone fixed. A retailer would find that to obtain supplies he must pay 9s. 4d. to 10s. To avoid detection though, the salesman would only charge up 8s. 8d., the balance being collected over the counter. Another trick of the sharp salesman was to cut 1 lb. or so off the breast of a carcass, and sell the remainder without reference to the maximum. It may be explained that cut carcasses are free of price control. Obviously these dishonest practices are not going to help the trade either at home or in Australia. They can only be utilised in times of scarcity, and it stands to reason that the buyers victimised will not miss a chance of retaliating when supplies are full and the market failing. It is always the way of things; a few, for the sake of a present small gain, are willing to mortgage the future for themselves and everybody else.

Recent cables indicate that the market is already weakening. Rough and Co. Limited advised their Australian agent, Mr. Edmund W. T. Adams, the end of February that the lamb and mutton market was stagnant, and that large quantities of colonial lamb coming from North America were being offered at 1s. 0½d. per lb. (½d. below control maximum). As regards beef, large stocks, mostly from South America, were available, and prices dropping. Information received from other sources states that arrangement had been made to reship 600,000 carcasses lamb and 100,000 carcasses mutton of New Zealand origin from the United States to Great Britain during February and March. It seems the American market has been altogether overstocked, and values there have slumped to such an extent that it pays to reship the meat to England. Between March and December last 1,898,000 carcasses lamb and 465,000 carcasses mutton were exported from New Zealand to the States, and according to official returns there were in store in America on 1st December, the latest figures available, 56,333,209 lbs. of frozen mutton and lamb. No doubt the bulk of this came from New Zealand. It would represent well over one and a-quarter million carcasses.

Another London cable, dated 2nd March, states that there is considerable congestion in the refrigerated stores in England, and that the discharge of steamers is being much delayed. Further, it is reported that importers are indisposed to buy New Zealand lambs ahead, as they understand that the March killing cannot be shipped until August. The freight position may not be altogether satisfactory, but we

can hardly believe it is as bad as all that. If March killings had to wait until August there would also be much congestion in New Zealand.

The date of removal of the maximum price control is still uncertain. The Imperial Government professes to be anxious to hasten the day, but has made it fairly plain that it will not be allowed to dawn until at least all Imperial stocks of meat are liquidated. That may be the end of May or later!

Australian Frozen Meat Exports to Ports other than in United Kingdom.

(Season taken as from 1st July to 30th June.)

Period.	Mutton Carcases.	Lamb Carcases.	Beef Quarters.
Season 1911-12	167,120	26,480	197,479
1912-13	166,474	27,373	206,982
1913-14	224,283	33,529	379,353
1914-15	91,725	806	208,827
1915-16	20,814	10,750	34,902
1916-17	15,785	8,025	13,560
1917-18	320	—	4,171
1918-19	33,039	6,950	26,891
1919-20	154,968	41,612	99,869
Monthly Totals, 1920.			
January	43,402	14,066	5,202
February	26,591	3,511	2,275
March	22,800	2,960	8,671
April	26,330	2,866	5,452
May	2,565	1,032	3,584
June	7,567	9,127	4,111
January to June	129,255	33,552	29,298
July	49,628	2,598	63,707
August	6,305	1,085	1,776
September	4,609	2,675	8,035
October	32,508	1,050	2,307
November	6,386	1,370	6,895
December	1,820	1,619	3,432
July to December	101,256	10,397	86,152
1921.			
January	7,053	7,401	6,534
February	7,420	2,027	4,942

South American Cable Service.

(FROM OUR OWN CORRESPONDENT.)

SOUTH AMERICAN FROZEN AND CHILLED MEAT EXPORTS.

Period.	Mutton.	Lamb.	Beef Qrs.
Total for 1911	3,043,262	1,092,155	3,807,320
1912	3,500,000	815,000	4,030,000
1913	1,909,061	671,290	4,477,160
1914	1,878,578	803,296	4,375,019
1915	921,435	442,132	3,531,842
1916	1,190,524	637,160	3,650,000
1917	783,250	408,250	2,795,500
1918	1,272,717	236,822	6,081,660
1919	1,462,376	216,014	5,119,923
1920	1,393,923	527,317	4,804,562
Monthly Totals—1920.			
January	95,447	7,616	419,810
February	121,306	22,836	419,027
March	76,952	3,271	473,444
April	108,578	69,594	420,881
May	25,600	52,000	174,500
June	45,000	92,000	375,000
January to June	475,923	247,317	2,242,662
July	223,000	50,000	432,900
August	145,000	27,000	527,000
September	182,000	44,000	485,000
October	184,000	59,000	466,000
November	78,000	14,000	262,000
December	106,000	82,000	349,000
July to December	914,000	280,000	2,521,900
1921.			
January	91,000	64,000	308,000
February	120,876	129,266	422,551

New Zealand Frozen Meat Exports to the U.K.

(Season taken as from 1st January to 31st December.)

PERIOD	Mutton. Carcases.	Lamb. Carcases.	Beef. Quarters.
Total for 1911	1,792,067	3,326,543	147,154
Total for 1912	2,360,789	3,191,197	149,397
Total for 1913	2,210,648	3,399,119	127,495
Total for 1914	2,771,102	3,644,777	371,604
Total for 1915	2,929,412	3,806,421	526,119
Total for 1916	2,456,115	3,118,317	727,772
Total for 1917	1,964,530	1,550,712	615,867
Total for 1918	1,348,884	1,317,989	537,017
Total for 1919	3,645,704	3,376,168	554,393
Total for 1920	4,676,575	2,031,473	594,546
Monthly Totals, 1920.			
January	216,214	119,437	20,016
February	256,935	157,578	20,852
March	243,434	112,624	16,615
April	189,346	157,159	33,380
May	337,170	228,274	43,255
June	298,874	334,471	45,373
January to June	1,541,973	1,109,543	179,491
July	519,521	363,743	102,626
August	177,277	65,391	16,646
September	453,148	155,064	112,958
October	623,075	62,754	82,123
November	598,666	30,854	—
December	762,885	244,124	100,702
July to December	3,134,602	921,930	415,055
1921.			
January	475,507	5,269	3,179
February	330,321	111,267	63,800
Clearances reported for Feb.—			
Feb. 3—Orari	71,843	3,280	12
8—Arawa	45,335	24,505	—
11—Port Nicholson	36,700	26,223	8,960
16—Paparua	69,281	5,736	—
17—Wangaratta	—	—	54,328
23—Somerset	81,671	11,983	500
23—Durham	25,491	39,540	—
	330,321	111,267	63,800

* In addition to the above, 279,088 carcasses lamb were shipped to U.S.A. in March, and in April 222,568 carcasses lamb to U.S.A. and 6851 carcasses mutton, 11,875 carcasses lamb to Vancouver, B.C., and in July 20,092 carcasses mutton, 360,493 carcasses lamb to U.S.A. In August 6529 carcasses mutton, 596,987 carcasses lamb to New York, 10,060 carcasses lamb to San Francisco, U.S.A., and 3500 carcasses lamb to Vancouver, B.C. In September 21,317 carcasses mutton, 438,544 carcasses lamb to New York, U.S.A., and 60.0 carcasses mutton, 3281 carcasses lamb to Vancouver, B.C. In October 126,914 carcasses mutton, 212,730 carcasses lamb, 593 beef to U.S.A., and 1000 carcasses mutton to Vancouver, B.C. In November 106,426 carcasses mutton, 173,325 carcasses lamb to U.S.A., and 2000 carcasses mutton, 4553 carcasses lamb to Vancouver, B.C. In December 183,913 carcasses mutton, 104,193 carcasses lamb to New York, and 1559 carcasses lamb to San Francisco.

American Packers' Finances.

From American papers it is evident that the U.S. meat packing firms, in common with those operating in other countries, have been hard hit by the slump in values of tinned meat, hides, tallow, wool, &c. The January issue of "The Producer," in commenting on the position, says:—

"Cudahy made the initial report on 1920 packing operations. The figures were even worse than expected. During the next thirty days the other big concerns will acquaint their stockholders with the result of last year's business. That losses have been heavy is an open secret. Packers are carrying enormous quantities of hides, wool, and by-product at burdensome cost, and paying exorbitant interest rates on large sums of money of necessity added to their working capital by reason of increased cost of live stock, high wages, and inability to realise. The year 1920 was the worst since 1907 in the history of the industry.

"Packer securities have slumped in consequence. Swift's common stock dipped under par in December, and Armour's preferred went below 80. Cudahy's common has been flirting with 50 since the dividend was passed; Wilson's preferred touched 80, and the common 35. Bonds have depreciated in sympathy with stocks."

Australian Frozen Meat Exports to United Kingdom.

(Only such vessels as have actually cleared the Australian Coast during any given month are included in that month's return.)

Season taken as from 1st July to 30th June each year.	NEW SOUTH WALES.			VICTORIA.			QUEENSLAND. (Including Darwin.)			SOUTH AUSTRALIA, WEST AUSTR. and TASMANIA.			TOTALS.	
	Mutton.	Lamb.	Beef.	Mutton.	Lamb.	Beef.	Mutton.	Lamb.	Beef.	Mutton.	Lamb.	Beef.	Mutton.	Lamb.
1911-12	Carcases. 909,604	271,527	16,741	Carcases. 851,034	1,047,182	4,087	Carcases. 78,549	602	429,731	Carcases. 69,901	131,340	276	Carcases. 1,909,088	1,450,651
1912-13	808,188	294,424	8,477	518,855	735,621	9,074	681,957	40,424	1,046,000	82,582	117,901	2,846	2,091,582	1,188,370
1913-14	1,315,437	403,533	78,195	961,914	1,278,898	115,280	402,486	26,250	1,058,213	18,817	34,216	24,064	2,698,654	1,741,897
1914-15	1,529,702	552,569	135,730	738,774	1,196,410	130,957	628,176	37,301	1,584,946	35,051	81,233	24,396	2,931,703	1,867,513
1915-16	291,486	361,843	551	—	47,548	—	263,565	52	903,582	—	—	—	555,051	409,441
1916-17	436,943	205,695	54,780	52,927	365,274	20,230	432,571	1,722	1,541,762	—	—	2,622	922,441	572,691
1917-18	81,776	14,052	7,483	48,783	146,903	—	45,026	10	1,890,336	2,212	952	602	377,797	161,917
1918-19	278,980	63,694	5,006	656,077	31,023	2,491	59,837	—	687,473	38,067	21,295	—	1,033,561	116,012
1919-20	828,413	293,992	21,910	2,251,411	1,526,578	18,559	182,597	1,132	749,998	309,113	95,417	7,162	3,571,534	1,917,119
Monthly Tot's 1919.														
July ..	—	—	—	—	—	—	—	—	152,238	11,009	8,723	1,554	11,009	8,723
August ..	32,343	3,305	—	303,190	101,978	221	1,998	—	142,485	8,546	—	—	346,077	105,283
September ..	87,316	13,975	—	32,051	29,622	—	58,266	1,110	115,799	43,794	—	—	221,427	44,707
October ..	37,068	9,598	—	217,028	217,576	—	20,167	—	50,910	76,512	30,384	—	350,775	257,558
November ..	100,771	75,788	34	305,037	286,591	—	26,435	—	128,530	42,415	10,405	—	474,658	372,784
December ..	118,169	96,133	243	445,105	429,874	5,137	11,339	—	20,307	21,517	8,661	4,355	596,130	534,668
July to Dec...	375,667	198,799	277	1,362,411	1,065,441	5,358	118,205	1,110	608,269	203,793	58,173	5,909	2,000,076	1,323,723
1920.														
January ..	39,006	8,798	803	275,375	203,615	—	—	—	—	5,143	—	—	319,524	212,413
February ..	65,579	11,861	1,609	355,202	172,179	3,350	—	—	—	38,984	24,818	—	459,765	208,858
March ..	18,591	5,058	—	16,351	938	—	—	—	—	10,409	—	—	45,351	5,996
April ..	52,771	10,227	319	124,740	47,828	3,822	49,383	22	54,074	—	—	—	226,894	58,077
May ..	146,095	28,556	6,758	164,070	35,647	1,029	15,009	—	41,921	50,784	12,426	1,253	375,958	76,659
June ..	130,704	30,663	12,144	13,262	730	—	—	—	45,734	—	—	—	143,966	31,393
Jan. to June..	452,746	95,193	21,633	949,000	460,937	8,201	64,392	22	141,729	105,320	37,244	1,253	1,571,458	593,396
July ..	21,072	8,531	—	52,112	8,077	—	—	—	34,279	30,757	173	—	103,941	16,781
August ..	8,914	2,077	—	32,561	32,088	7,503	793	—	49,216	20,309	4,840	—	63,577	39,005
September ..	11,083	12,361	52	167,391	59,451	1,583	—	—	127,168	3,580	477	15,808	182,057	72,289
October ..	14,791	325	—	56,140	19,809	1,833	—	—	104,018	4,853	5,539	—	76,784	25,753
November ..	25,741	1,100	679	5,826	2,754	52	—	—	—	4,141	864	634	35,708	4,718
December ..	1,618	5,933	—	2,100	140,451	—	—	—	58,954	13,850	128	—	17,568	155,512
July to Dec.	83,219	30,327	731	317,133	271,710	10,971	793	—	373,980	77,490	12,021	15,942	478,635	314,058
1921.														
January ..	9,720	21,717	752	3,851	76,216	—	—	—	58,271	1,345	1,946	—	14,919	99,909
February ..	29,365	73,814	6,348	599	35,239	—	—	—	134,20	—	—	106	29,964	109,053
Clearances reported, Feb.—														
— Booral ..	—	—	—	—	—	—	—	—	4,048	—	—	—	—	—
1 Westm'land ..	—	—	—	—	—	—	—	—	47,693	—	—	—	—	—
10 Aeneas ..	2,801	3,564	—	—	—	—	—	—	3,640	—	—	—	2,801	3,564
11 Naldora ..	3,000	1,000	—	337	946	—	—	—	—	—	—	—	3,337	1,946
18 Argylshire ..	4,687	6,979	—	—	—	—	—	—	71,882	—	—	—	4,687	6,979
19 Cer mic ..	9,764	50,706	3,756	108	34,293	—	—	—	—	—	—	106	9,872	84,999
19 Multi des. ..	1,443	2,867	—	154	—	—	—	—	3,854	—	—	—	1,697	2,867
23 Ormonde ..	—	5,502	—	—	—	—	—	—	8,203	—	—	—	—	5,502
24 Bellann ..	7,670	3,196	2,592	—	—	—	—	—	—	—	—	—	7,670	3,196
	29,365	73,814	6,348	599	35,239	—	—	—	134,320	—	—	106	29,964	109,053

1921.

TO OTHER PORTS.

February — Kanowna — From Queensland: 188 quarters beef to Manila.
 1—Ventura — From New South Wales: 703 carcasses mutton, 1884 quarters beef to Honolulu.
 5—St. Albans — From Queensland: 100 carcasses lamb to Manila.
 8—Monto — From New South Wales: 2387 carcasses mutton, 1327 carcasses lamb. From Queensland: 1131 quarters beef to Singapore.
 23—Ormonde — From Queensland: 1682 quarters beef; from New South Wales: 3058 carcasses mutton—all to Port Said.
 23—Toiyuan — From New South Wales: 77 quarters beef to Manila; 772 carcasses mutton 600 carcasses lamb to Hong Kong.

The clearances of frozen meat from the Commonwealth to all overseas ports during February totalled 37,384 carcasses mutton, 111,080 carcasses lamb, 145,716 quarters beef, which compared with the output for January shows an increase of 15,412 carcasses mutton, 3770 carcasses lamb, and 80,159 quarters beef.

When placed beside the total for the corresponding month of last year (February 1920) there is an increase of 138,479 quarters beef, and a decrease of 448,972 carcasses mutton and 101,279 carcasses lamb.

An analysis of the various exports for the month under review shows that 29,964 carcasses mutton, 109,053 carcasses lamb, 140,774 quarters beef were consigned to Great Britain, 703 carcasses mutton, 1861 quarters beef to North America, while ports in the East, &c., take the balance, viz., 6717 carcasses mutton, 2027 carcasses lamb, and 3078 quarters beef.

Queensland sent away 100 carcasses lamb, 137,321 quarters beef, New South Wales 36,785 carcasses mutton, 75,741 carcasses lamb, 8289 quarters beef; Victoria 590 carcasses mutton, 35,239 carcasses lamb; and South Australia 106 quarters beef.

Meat Notes.

Cables state that the American meat-packing companies have reduced the wages of 200,000 of their employees in various cities by 12½ per cent., and also abolished the basic eight-hour day.

Cables report the voluntary liquidation of S. V. Nevamas and Co. Limited, London, meat importers, &c. The liabilities are said to be £250,000, and assets £50,000, the Ministry of Food being the chief creditor.

The Quartermaster's Corps of the United States Army the end of the year was offering for sale about 90,000,000 tins of bacon, corned beef, roast-beef hash, and sausage. The minimum purchase order was £50.

According to American exchange, the consumption of horse flesh as human food is steadily growing in the United States. A number of towns have shops where it is sold. All horses are examined by Federal meat inspectors and conspicuously marked with the words "Horse Meat."

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**Packing Houses—Oss, Holland; Esbjerg,
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**FROZEN AND CANNED MEATS, RABBITS, BUTTER,
CHEESE, TALLOW, WOOL, SKINS, HIDES, PELTS, GRAIN,
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"Zwanen, London."

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Hop 4730 (2 lines).

A steamer recently arrived at a French port with 68,000 quarters of frozen beef from Madagascar, to be used principally for feeding the local garrison. Wholesale prices of beef at the port in question are given as follows:—Fresh, 8½d. per lb.; American, 7½d. per lb.; Madagascar, 5½d. per lb.

Shipments of frozen beef from South Africa during December totalled 7721 quarters, making the aggregate for the year 69,885 quarters, a small showing compared with previous years. In 1919 the exports were 285,367 quarters, in 1918 123,354, in 1917 309,214, and in 1916 115,992 quarters.

Operations of the Sydney Meat Preserving Company Limited for the six months ended 31st December, 1920, resulted in a loss of £2399 7s. 5d., due largely to the compulsory reduction of killings in consequence of the small supply of sheep and cattle yarded at Homebush. The idea of enlarging the works and bringing the plant more up to date is receiving the attention of the board.

The annual report of the Australian Stockbreeders' Association, which is an off-shoot of the Q.M.E. Company, showed that for the year ended 30th November last the credit balance was £15,494, or with the amount held over from the previous year £21,550, out of which a dividend of 6 per cent. was declared, absorbing £13,099. The balance was carried forward. The report referred to the drought conditions and losses of stock in the early part of the year, but stated that the properties were now in a very satisfactory condition.

Exports of frozen, cured, and canned meats from Canada for the year ending October 1920, show a decrease, compared with those of the previous year, of 127,829,500 lbs. This decrease represents a value of nearly £10,000,000. The export figures for the two years, reported by the Dominion Bureau of Statistics, are given as follows:—

	1919.	1920.
Bacon and ham, lbs.	208,906,038	148,674,000
Pork, lbs.	18,002,313	4,851,200
Beef, lbs.	129,944,411	85,916,000
Canned meats, lbs.	11,398,393	980,458

Zwaneberg Limited, Central Meat Market, London, write under date 23rd December:—"Trade in Smithfield during the last month has been pretty brisk, although only very small supplies have been released by the Government. Good quality New Zealand mutton has been very short and much in demand, and supplies on hand were far away from meeting the requirements. This also applies to lamb. There has been considerable business done in forward contracts, both with Australian and New Zealand mutton and lamb, although it is still uncertain when control will cease."

The annual report of the Queensland Meat Export Company for the year-ended 30th November showed a credit balance of £29,029, to which was added £28,722 from the previous year. A dividend of 6 per cent. was declared, absorbing £39,298, and leaving £16,452 to be carried forward. The season was unsatisfactory, as owing to the shortage of cattle in Southern Queensland the works could only run for two months, while the quality was not good. When the Ross River Works opened the prospects were good, but though there was no trouble with the meat works employees, proceedings were interrupted by a strike of wharf labourers, who refused to handle meat, so that oversea boats were kept away from Townsville. The works were compelled to suspend operations, and this led to great loss to the company and employees. When the waterside workers were willing to go on the cattle had gone off in condition. The position had been greatly affected by the falling off in the value of by-products.

The Colonial Consignment and Distributing Company Limited, London, write under date 29th December:—"Trade on the whole has been very satisfactory for all descriptions of meat of good quality, but inferior meat has been in very poor demand. Considering the amount of unemployment that is prevalent at the present time, it is surprising the demand is as good as it is. One would expect a readier sale for the cheaper grades of meat, but such is not the case. Top quotations are easily made for small good carcasses of mutton or quarters of beef. Last week inferior Australian and New Zealand beef was hanging on the hooks at Smithfield all the week without being disposed of; the trade apparently were holding off awaiting the arrival of some of Swift's chilled South American beef, which was due to arrive on the 23rd December. As a matter of fact, the whole shipment was sold before its arrival in the market. New Zealand lamb, when of good quality, sells readily, but difficulty is experienced in disposing of some of the plain Australian carcasses. The same remark applies to mutton, whether the meat is controlled or not. Good meat of any description will sell readily at high prices on this market, but anything of secondary quality seems very difficult to move, even low prices will not induce sales. The explanation of the situation appears to be that the unemployed are unable to obtain meat at any price, while those who are employed are mostly receiving good wages, and can afford to purchase the better quality and less wasteful joints of meat. Even 6d. per lb. wholesale for cut ewe mutton is a high price compared with pre-war value."

Position and Prospects in New Zealand.

(FROM OUR OWN CORRESPONDENT.)

CHRISTCHURCH, 1st March, 1921.

After being promised in January last a decrease in the freight on frozen meat it came with a shock to producers and exporters to learn that instead of there being a decrease there was to be an increase. These facts, together with the weakness and uncertainty of the meat market at Home, have caused a drop of about 1d. per lb. in the prices offered by exporters for mutton and lamb.

The falling prices for wool, skins and hides were bad enough, but sheepowners have now to face a double loss. Mr. H. A. Knight, chairman of directors of the New Zealand Refrigerating Company, referred at the annual meeting of the company on the 24th ult. in a very cautious manner to the present position. After dealing with the markets for wool and tallow, he went on to say that "values for freezing stock, under such conditions, could not naturally be maintained at anything like the rates still current were it not that the demand for our meat, in spite of the uncertainties surrounding the conditions under which it will be marketed, has up to the present been characterised by a fairly confident tone, and at values which, if maintained, would help to compensate for the reduced value of the wool, pelt, and other by-products. In view, however, of the now world-wide tendency for values of all products to depreciate from the abnormal level reached under war conditions, it is difficult to justify the belief that meat especially will be immune from the general downward tendency."

The readjustment has begun in a very sudden manner, but it is probable that the present depression may ease a little after the markets have settled down again.

Buyers' Limits of Prices.

The following buying quotations, it is reported from Dunedin, have just been issued by a leading New Zealand export firm, and in the case of beef a comparison with prices on 15th February is made:—Prime ox, 1st March, 25s. 10d. per 100 lbs., 15th February, 42s. 6d.; seconds ox, 21s. (37s. 6d.); prime heifer, 22s. 6d. (37s. 6d.); prime cow, 17s. 6d. (25s.); seconds cow, 12s. (20s.). Lamb, up to 42 lbs., 7½d.; 42-50 lbs., 6½d.; over 50 lbs., 5½d.; seconds, 7½d.; wether, up to 64 lbs., 3½d.; 64-70 lbs., 2½d.; over 70 lbs., 2½d.; ewe, up to 64 lbs., 2½d.; 64-72 lbs., 1½d.; over 70 lbs., 1½d. This sharp fall in prices must affect others besides graziers and farmers, as the present rate of wages cannot be maintained by the country on low prices for wool and frozen meat and its by-products.

Restoring the Position of New Zealand Meat.

Sir Thomas Robinson, formerly Agent-General in London for Queensland, and Director of Meat Supplies in England during the war, is now visiting New Zealand at the suggestion of Mr. Massey, Sir Joseph Ward and Sir Thomas Mackenzie. In an interview on arrival he said it was beyond question that during the war New Zealand produce reached the European markets in inferior condition. This was inevitable. The discontinuance of careful grading, the necessity for telescoping carcasses, careless handling, the methods of sale all tended to deteriorate the meat, and so impair its reputation. In order to restore it to its former position in public estimation it would be necessary to exercise the greatest care and discrimination at every stage of its preparation for the market. If this were done, New Zealand frozen meat would very soon be as popular as it was before the war, and command the highest market prices.

Export of Frozen Meat Unrestricted.

The New Zealand Minister of Customs has now decided to grant general permission to export to any destination frozen mutton and lamb, and chilled and frozen beef. In future declarations as to the date of slaughtering and certificates from Government meat works inspectors will not be required.

Frozen Meat Freights.

A good deal of feeling has been aroused among producers at the announcement made by the London Tonnage Committee of a rise in freights on frozen meat. The feeling is accentuated by the fact that a reduction had been promised as late as January. A strong protest was made by a meeting

of 300 Wairarapa sheep farmers, and the Prime Minister was asked to make the strongest possible representation to have the injustice removed. The Prime Minister accordingly cabled to the High Commissioner in London, stating that

"The New Zealand Overseas Shipowners' Committee have advised the freezing companies that, under instructions from the London Tonnage Committee, rates of freight are to be charged in March and April steamers amounting to beef 6 per cent., mutton 8 per cent., lamb 10 per cent., increase on the rates set out in your cable of 5th January. The imposition of these increased rates, instead of the reduction advised by you, is indefensible. Please make the strongest protest to the Ministry of Food, and request the immediate revision of these rates, and the establishment of rates as advised in your telegram of 5th January. The matter is urgent in view of the adverse influence of this announced increase upon the market values of freezing stock and upon the freezing companies' operations generally."

The Prime Minister has now received a reply from the High Commissioner stating that the Ministry of Food has agreed to pay the shipowners at the rate of 144s. per 40 cubic feet of insulated space, charging shippers of free meat poundage rates equivalent thereto, plus 5 per cent. to cover cost of administration. The following poundage rates will therefore operate on steamers for March and April loading:—Beef, 115-16d.; mutton, 2½d.; and lamb, 25-16d., all nett. Sir James Allen adds:—"The Ministry regrets that it has become necessary to raise the rates after the new season's shipments have commenced, but in order to avoid hardships where a commitment has been entered into, the Wellington committee has been instructed to ask the freezing companies to telegraph their actual contracts with a view to an adjustment of the rates in such cases. I have made strong representations to the Ministry, but they are unable to make further concessions." The Prime Minister is to make further representations in the matter.

Over-weight Sheep.

It is found in the North Island, says one newspaper writer, that the delay in opening the freezing works this season has resulted in stock carried on good pastures putting on too much condition. A large proportion of ewes and wethers weigh over the stipulated 64 lb. factory weights, for which the maximum price is paid; consequently farmers are finding that a 74-lb. animal nets them practically the same amount as one of 64 lbs. The matter is one that does not afford too much satisfaction among growers, but with the continued demand for smaller sheep for the Home market it is not likely that any improvement will take place.

Imperial Control of Meat.

At a recent meeting of the New Zealand Board of Agriculture and the Producers' Committee a resolution was passed that the Prime Minister should cable to the Imperial authorities asking that the control over the prices of imported meat should be removed, or if that was impossible, that prices of lamb and mutton be adjusted in order to place New Zealand producers in a better position relatively to the Home producers. A reply has now been received which states that the authorities in England cannot see their way to accede to the request made, but that it may be possible at the end of March to remove the control. [Indications and other official statements point to the end of May as being a more likely date. —Ed.]

New Zealand Refrigerating Company.

The balance-sheet and profit and loss account of the New Zealand Refrigerating Company for the past year shows that the balance available for appropriation is £101,561 11s., which the directors recommend should be disposed of as follows:—To pay a dividend of 1s. 3d. per share on the 300,000 fully paid shares, and of 7½d. per share on the 600,000 shares, 10s. paid, £37,500; to place to the reserve account, £20,000; leaving an amount to carry forward of £44,061 11s.—total, £101,561 11s.

Southland Frozen Meat Company.

The net profits of the Southland Frozen Meat Company for the year are £17,823 13s. 10d., which amount, with the balance brought forward from last year, now makes the credit balance at the profit and loss account available for disposal £27,828 4s. 10d., and this the directors recommend should be allocated as follows:—To place to general reserve (bringing the total to £50,000), £2463; to payment of a dividend of 5 per cent. and a bonus of 3 per cent. on the capital paid-up, £9083 3s. 2d.; and to carry forward the balance, £16,282 1s. 8d.—total, £27,828 4s. 10d.

New Freezing Works for North Auckland.

It is rather unusual for a Harbour Board to take active steps towards the erection of freezing works, but the Whangarei Board evidently realise their importance to the district as well as to the revenue of the board. The chairman of the board remarked at a recent meeting that the prices of live stock had fallen since the destruction of the freezing works at Reotahi, and he did not know whether the Whangarei Freezing Company might be inclined to shift to the Kioreroa site, which the board considered the better one. The board decided to immediately undertake to reclaim a site for freezing works and let on lease, the board undertaking to provide wharfage accommodation and the necessary dredging.

Troubles in Freezing Works.

A go-slow policy in one of the New Zealand refrigerating company's southern works was settled as soon as the company began to pay off the men who were wasting time. A similar case resulted in more drastic action at Gisborne. Owing to the adoption of a go-slow policy by the butchers in its employ the Poverty Bay Farmers' Meat Company closed the Waipaoa Freezing Works, and paid off a large number of hands. A director of the company stated to a reporter that the mutton output had decreased from 3200 carcasses on Monday to 900 on Tuesday. The decrease was maintained since. It is stated that the go-slow policy was adopted by the mutton butchers with a view to compelling the company to pay a bonus of 5s. per 100 sheep.

An Accurate Forecast. Prices for Primary Products.

Our London meat correspondent forwards us the following from Messrs. Gordon, Woodroffe & Co., who express a wish for its insertion in *The Review*. It is an extract from a letter addressed by the firm to all their Australasian clients on 7th July, 1920:—

"Tallow, Wool, Tinned Meats, Skins, &c.—A steadily declining market may be looked for, not only in the above articles, but in almost every kind of produce, and the inflated values which have prevailed can be altogether discounted.

"It is quite possible that pre-war prices will be far closer to selling values within the course of the next year or two than present ones, unless something unforeseen occurs, such as the opening up of a large trade with Central Europe, which seems most unlikely. This country is over-stocked with most commodities, America is holding more than she can finance comfortably, and must eventually liquidate her vast supplies, and as long as there are more sellers than buyers, declining markets must naturally result. The general trade of the country is good, and continues to expand."

Messrs. Gordon, Woodroffe and Co. state, in conclusion, that referring to the last sentence, the expansion of trade has unfortunately been killed by strikes, labour disturbances, excessive taxation, adverse exchanges, &c., and in consequence the rapid decline in values has been accentuated.

Refrigerated Motor Trucks.

To the Editor.

Sir,—In your issue of the 16th February you publish an illustration of a "refrigerated motor truck" used by Morris and Co., of Chicago, for transporting frozen meat.

It will perhaps interest you to know that the whole of the meat supply of the metropolitan area of Adelaide is delivered from the metropolitan abattoirs (6½ miles from the city) to the butchers' shops by means of insulated motor trucks. The Metropolitan Abattoirs Board has been delivering chilled meat to the butchers for nearly eight years by this method, and was probably the pioneer of delivery of carcasses by motor. The trucks are insulated with silicate cotton, and are dust-proof.

The carcasses are hung from the roof of the van, and are loaded into the vans by means of a bar connecting with the running bars at the chilling room doors. At the butchers' shops the meat is run out of the van on to the rails in the shops by means of the connecting bar, so that there is a minimum of handling and a quick despatch.—I am, Sir, &c.,

F. W. FILLMORE,
Secretary and General Manager.

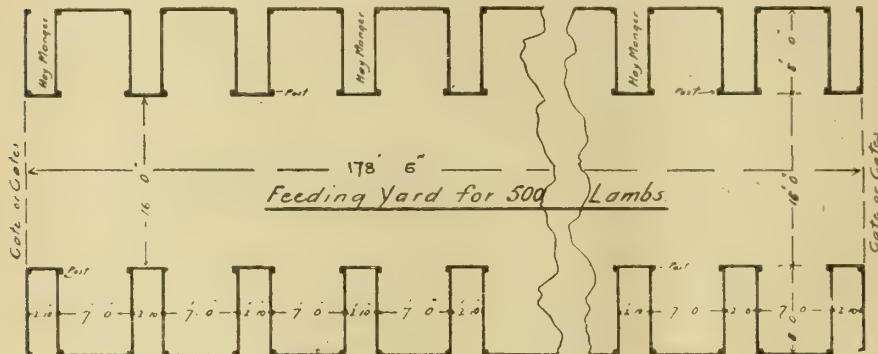
Metropolitan Abattoirs Board,
Adelaide, 7th March, 1921.

Utility Page.

Hand-feeding Hay Yards.

Mr. I. J. Warnes, of Wahroonga, Koorringa, S.A., who has recently returned from a tour round the world, was granted a commission to inquire into the hand-feeding of stock in Great Britain and America, and in his report to the Government gives some very valuable advice on this important matter.

He says, *inter alia*:—"I am quite satisfied, from what I have seen on my travels, that Australia, and particularly



PLAN OF HAND FEEDING HAY YARD.

South Australia, should never be without fat meat, and that extreme high or low prices should not exist, as a regulated supply of fat stock could always be available. This can be brought about by hand-feeding, as I have seen it practised in other lands. Lucerne hay, barley, oats and wheat can be grown or easily procured in most places. This being so, it is only necessary to start on correct lines and go ahead, and I am satisfied that even for a man in a small way, hand-feeding will be a good thing.

"In America I found hand-feeding universal, and carried out on commercial lines, and practised every day all the year round. Different methods are adopted, such as feeding all stock in the same way as pigs are fed on sugar beet, but the dry feeding method was that which I liked best, as more suited to Australia, and, in fact, was more general than any other in America. I should say that at least 75 per cent. of those engaged in hand-feeding used this method. The ration consists of dry lucerne hay and maize, and if maize is not procurable, then barley, oats, or wheat will do. For lambs, the ration would be lucerne hay $1\frac{1}{2}$ lbs. and $1\frac{1}{2}$ lbs. of maize for the first 30 days; this is increased to 2 lbs. of lucerne hay and 2 lbs. of maize. On this scale 90 to 120 days should fatten most lambs. If too much grain is given the lambs throw it up, and this making them ill, puts them off their feed for days, hence it will be seen that great care must be taken.

"All the lambs are yarded out in the open, and notwithstanding the fact that snow was on the ground a foot or more deep, when I was there, and had been so for weeks, no covering is provided. Straw bedding is continually provided in the yards, which is replaced with fresh straw as required. The old straw, which is quite broken up when removed, forms a valuable manure, and at most yards a good heap was noticeable.

"All feeders were of one opinion—that the most convenient number of sheep for each yard would be 500. I saw 6000 in one set of yards, but all were in bunches of 500.

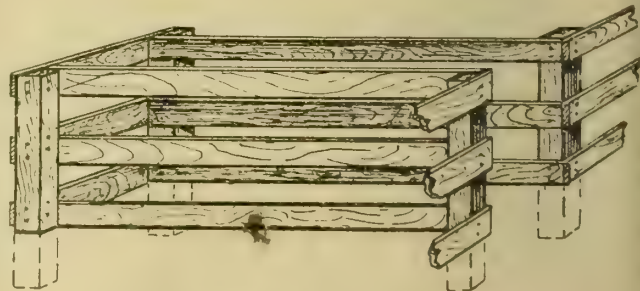
"A yard to hold 500 should be 160 ft. long by 22 ft. wide. Along the centre, lengthwise, is an open race 16 ft. wide, the feeding mangers being spaced 7 ft. apart, projecting at right angles from the fence on each side towards the centre; these mangers being 8 ft. long and 22 in. wide, making 21 mangers on each side, or 42 in all, and these are fixtures. The yard and hay-feeding mangers, 2 ft. 10 in. high, all made of flooring boards. The bottom board is on the ground, then a space of 8 in., another board, another space, then the top board. All the yards are made in movable sections.

"Hay is got ready and placed around on the outside of the fence, so as to be readily accessible, having been first weighed, so that the exact quantity is used—that is, 1000 lbs for 500 lambs. In this hay-yard the lambs live night and day, except for the time they are in the grain-feeding yard, which is only 10 or 15 minutes. Water is provided in a

trough about 12 ft. long, and is always available. The corn-feeding yard is placed near the corn-house. Here the lambs are fed out of troughs 16 ft. long and 12 in. wide. These troughs are reversible, and have a depth of 3 in. on either side. They can be turned over, and so a dry trough is always available. When in position they are 16 in. off the ground. The grain is measured exactly, and placed in the troughs. When ready, the gate of the hay-yard is opened, and the lambs at once rush to the corn-yard, where sufficient room must be provided so that each lamb may get to the feed at once. The greatest essential, I am told, is regularity and punctuality; the corn-yard must be ready to

the minute. The lambs will remain very contentedly in the hay-feeding yard, but if kept waiting here only a few minutes, will crush towards the gate, and trouble will arise. One feeder kept a yard of lambs waiting ten minutes for me to see the effect. During that time some of the lambs got down and were trodden on; this naturally unsettles them. I was assured by one feeder that punctuality was equal to one-third of the feed.

"While the lambs are eating the corn, the hay is placed in the mangers in the hay-feeding yard, and as soon as the corn is eaten, the lambs rush back to the hay-feeding yard.



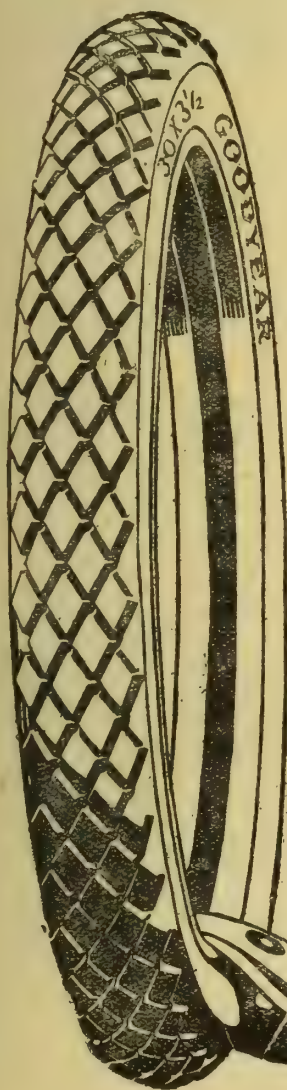
SKETCH OF HAY MANGER.

The hay is fed only once daily, and, in consequence, towards corn-feeding time the lambs will eat up even the sticks of the hay.

"The lambs are well sheltered by the hay in the mangers, and by the hay around the yards. When I visited the yards I saw from 500 to 6000 in sets of yards, and altogether about 30,000 in three hours. One man can easily look after 1000 sheep. The yards I saw 6000 in were looked after by three men.

"In conclusion, may I just emphasise one or two points. Grain must be fed with hay. It is useless to try and force the fattening of lambs. Regularity and punctuality are essential. And yarding is probably the most important factor."

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"I have this day handed to Messrs. Turpie and Gillespie for repair, owing to a stone piercing same, a 30 x 3½ Goodyear All-Weather Tread Tyre which has travelled over 16,000 miles. This is its first time off the back wheel of my car, which has very heavy service to perform in my shire work. The cover appears to be good for several thousand miles yet. It has seen out several other makes of covers, and has convinced me of the good value of Goodyears. I attribute its long life to: (a) its quality, (b) proper care in inflation."

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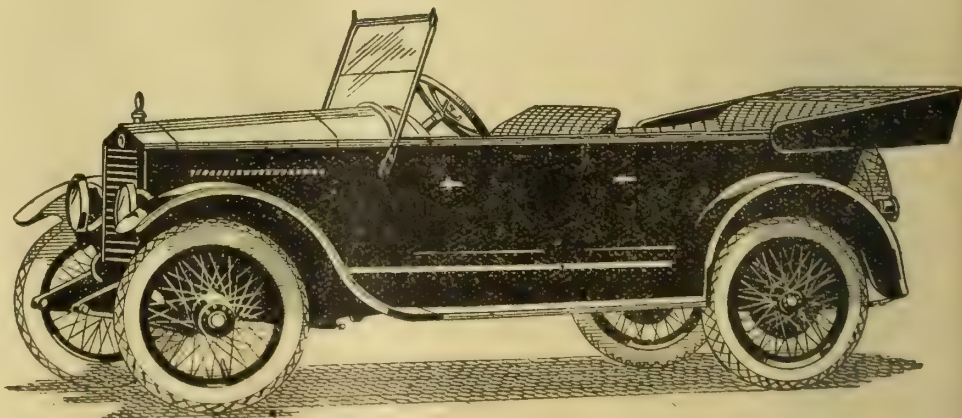
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STUD STOCK SUPPLEMENT.



NOTICE TO STUD STOCK ADVERTISERS

As it is our rule to publish "THE PASTORAL REVIEW" on the 16th of the month, it is necessary that all alterations for the Stud Stock advertisements must be in the printers' hands at later than the 6th of each month

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South Australia.



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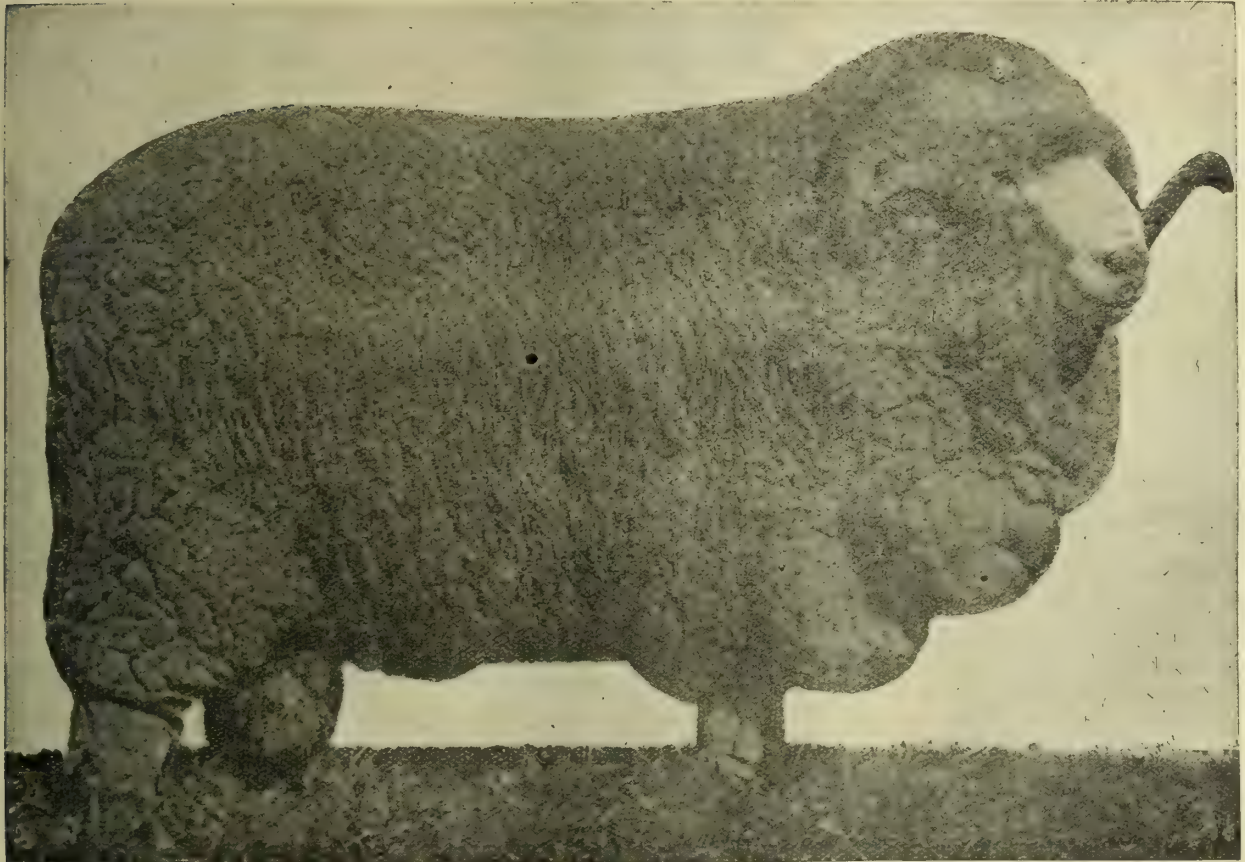
Or to the Manager.

Telegrams—East Bungaree, Clare, S.A.

Telephones—East Bungaree, Clare, S.A.

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Telephone: Clare, S.A.

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**Special Stud Ram, "Progress" (4 years) by "Perfection 1—Miss Togo.
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Orders for stud and flock rams booked through The Manager, ANAMA STATION, Clare, South Australia.

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All rams and ewes classed by Mr. H. C. Pennefather.



**Special Stud Ewe, "Lady Togo." Cut 20 lbs. 1 oz. wool; Height—Shoulder, 2 ft. 8 in.
Rump, 2 ft. 9 in.; Girth, 5 ft. 9 in.; Length, 3 ft. 11 in. Bred by Walter Hawker**

Bred by WALTER HAWKER, Anama, Clare, South Australia

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Stud
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Flock
Rams
for
Sale

Stud
and
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Rams
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BUNGAREE SPECIAL STUD RAM, No. 32.

For particulars apply:—

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Bungaree—Clare—South Australia

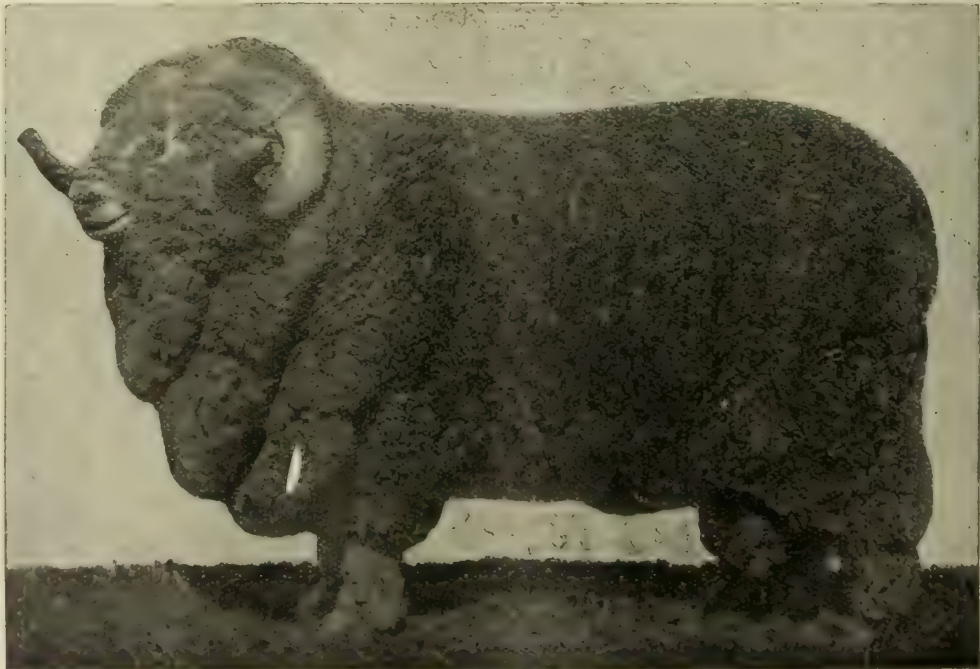
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The property of K. P. P. Sawers.



DAN 5.

These big framed, plain bodied, vigorous constitutioned sheep are grazed on natural grasses only, in a 12½ inch rainfall, and have proved themselves under both adverse and favourable conditions in all parts of the Commonwealth and in South Africa.



WOOLSCOUR 8.

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Telephone No. 1 Yarcowie

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"Dinkum," Aged 2 years and 2 months. Grand Champion Strong Wool Merino Ram (Unhoused) Sheepbreeders' Show, Sydney, July 1920.



"Broad Charles," Grand Champion Merino Ram (Unhoused) at N.S.W. Sheepbreeders' Show, Sydney, July 1919.



3 Champion Ewes. 1½ years (unhoused) Sheepbreeders' Show, Sydney, 1920.
Left to right—Reserve Champion, Grand Champion, Champion Strong Wool



Grand Champion Merino Ewe (Unhoused) at N.S.W. Sheepbreeders' Show, Sydney, July 1919.



Grand Champion Merino Ewe, 1½ years (Unhoused) Sheepbreeders' Show, Sydney, July 1920

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This stud was founded by the purchase of 1 ram and 60 ewes from some of the leading studs of New South Wales (pure Peppin blood) for the total sum of 5555 guineas, which at the time was most probably a world's record price for any one breeder to have paid for this number of sheep on which to found a stud.



Pen of five Ewes. An offer of 900 guineas made and refused.

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Large frames, plain bodies, with a covering of exceptional length and quality.

Bred and grown on a country with an average rainfall of 9 inches.



Head of Stud Ram.



"PRINCE CHARLIE," 3½ years. Cost 3000 guineas. Leased to a leading South Australian Stud for one month for 1000 guineas, being probably a world's record. Sire "Lord Charles," sold for 2000 guineas, and the grand sire "Sir Charles," sold for 1000 gns.



Heads of Stud Ewes.



Group of eleven Ewes. Cost 100 guineas each.



Typical Flock Rams. Used to breed Flock Sale Rams.



"NONSUCH," Mallett Stud Ewe, for which an offer of 200 guineas has been made and refused.



"ADDITION," 2 years, by "Dandle Pinmont." Purchased for 1200 guineas.



"DANDIE AGAIN," 3 years, by "Dandle Pinmont." Purchased for 1000 guineas.

For particulars of Stud and Flock Rams apply to
MAURICE COLLINS, Mallett, or Abberton Park, Aberdeen, South Australia.
 Telephone 14 Torowla, or 74 Koolunga.

MOUNT CRAWFORD MURRAY MERINO STUD



CHAMPION RAM LION II.

Grazed at large on Naturalised Grasses only and not Lucerne
Bred by and the property of ALICK J. MURRAY, Mount Crawford, South Australia.

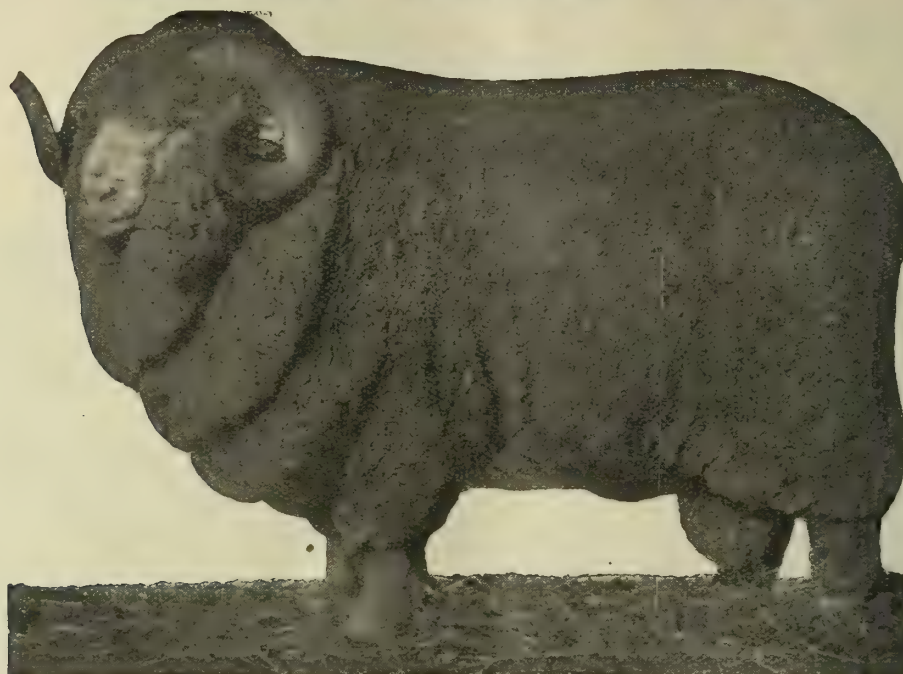
— THE MURRAY MERINO FLOCK —
was founded by the late JOHN MURRAY in 1843.

MURRAY Merinos have been INBRED for seventy-one years, and are famous throughout Australia,
New Zealand, and South Africa for their robust constitution, large symmetrical frames,
and heavy fleeces of profitable wool.

FULL PARTICULARS CAN BE OBTAINED FROM—
ALICK J. MURRAY, Mt. Crawford, South Australia.

Rhine Park —and— Cappeedee

MURRAY MERINO STUDS.



RHINE PARK RAM.

Champion at Adelaide, 1913. 3 years old. Cut fleece 29½ lbs.

THE MURRAY MERINO FLOCK was founded by the late JOHN MURRAY in 1843.

The MURRAY MERINOS have been INBRED for seventy-one years, and are famous throughout Australia, New Zealand, and South Africa for their robust constitution, large symmetrical frames, and heavy fleeces of profitable wool. These Sheep are grazed at large on naturalised grasses only.



2 YEAR OLD CAPPEEDEE STUD RAM, HAIG.

For full particulars apply

MURRAY BROS., Rhine Park, Eden Valley, South Australia
and
WALTER S. MURRAY, Cappeedee, Hallett, South Australia

KOO-OWIE STUD MERINUS

The property of THOS. SANDLAND, Koo-owie, South Australia.

Stud and
Flock
Rams
for Sale.



Stud and
Flock
Rams
for Sale.

Leading Sire "BEATTY."

These sheep have been bred for 30 years in a 15 inch rainfall and are noted for their high cutting value per fleece of long, bold combing wool and carry valuable fleeces into age. Plain bodied, big sheep and great movers.

For particulars apply to—

K. Chester Sandland, Koo-owie, Kooringa, South Australia.

CANOWIE STUD

The Stud was established in 1857. Rambouillet Foundation.



Don Cronge, an Exhibition Ram (by Cronje). Offering Progeny 1920.



Sires Used
have cut
up to
37 lbs.



Stud Ewes
mated
have cut over
25 lbs.



STUD AND FLOCK RAMS FOR SALE.

Flock Rams, 4 & 6 guineas.

Selected Flock, 10 guineas.

Stud Rams, 25 to 75 guineas.

Special Studs from 100 guineas upwards.

For particulars apply—

A. G. RYMILL, Managing Director, or A. J. McDonald, Manager, Canowie.

14 Alma Chambers, Adelaide.

Cables—RYMILL, Adelaide.

Hallett, South Australia.

ROSEBANK MERINOS

SOUTH AUSTRALIA

All Melrose Sheep are grazed on natural pastures only.

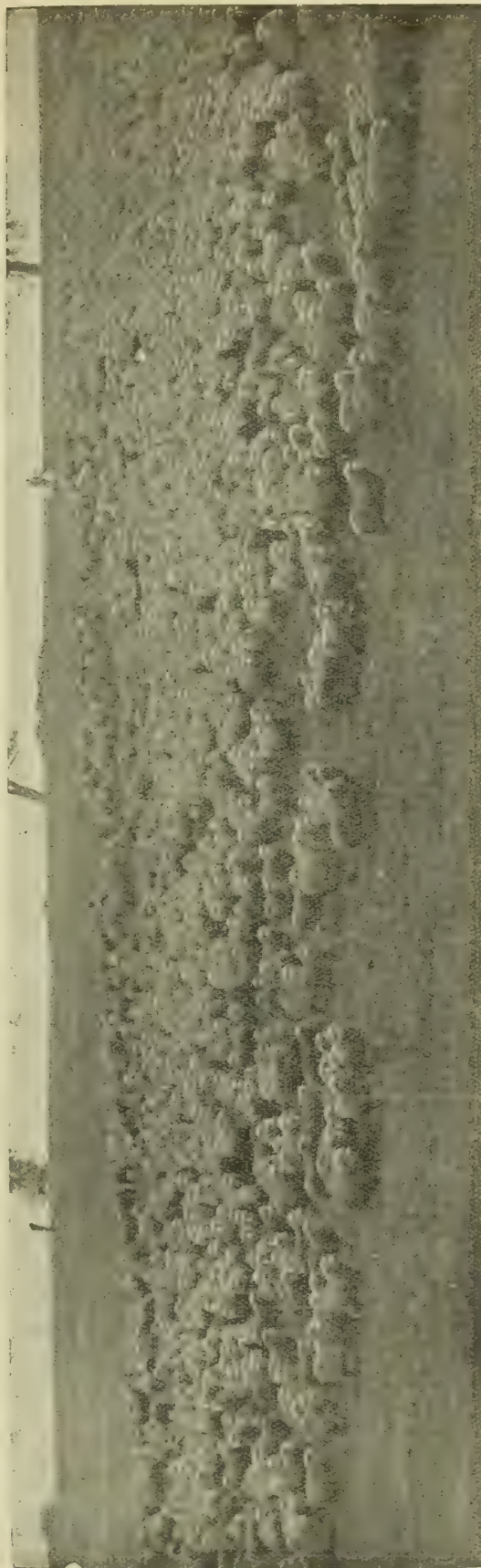
Rosebank secured Champion for Ewe at the Adelaide Royal Show three years in succession, 1910 to 1912. Awarded to different sheep by three different judges. Also secured the whole of the First Prizes offered by the Society for Ewes in 1912.



1½ Year-Old Ewes

Cut 22½, 21, 20, 18½ lbs. of Wool, 1917.

Bred by and the property of G. R. and A. Melrose, "Rosebank," Mt. Pleasant.



6,700 Hoggets travelling to shearing shed, 1917. Averaged 11 lbs. 5 ozs. under 12 months' growth.

G. R. & A. MELROSE, "Rosebank," Mount Pleasant, S. Aust.

THE KOONOONA STUD

Large framed,
bold woelled,
grass fed, pure
Australian
Merinos.
Founded in
1863.
Quotations
given for stud,
selected and
flock rams

Apply:—
Koonoona
Proprietors,
Cowra
Chambers,
Adelaide;
or
W. G. HAWKES
Manager,
Koonoona,
Burra, S.A.



Special Stud Ram, "LORD KITCHENER," 3½ Years Old, by "Rajah." Cut 33 lbs. Wool.

THE KOONOONA STUD.
Burra, South Australia.

Burrawang Merinos

Estate of the Late C. Hedley Edols.

The Stud is classed by Mr. W. O'Brien, of Mumblebone.



¶ Since 1880 the Burrawang Flock has been maintained solely from Wanganella blood. In that year six very high-class rams were purchased from Austin and Millear. One of these, "Old Bestwool," laid the foundation, and created the present high reputation of the flock. At the same time 700 2-tooth rams were purchased from the same source, nearly all of "Premier" and "Warrior" strains, considered two of the best rams on Wanganella. In 1887 two more high-class stud rams were purchased from Wanganella; since then no other purchases have been made until 1918, when a high-class Murgha ram was purchased at a cost of 1000 guineas. Although the country has altered the type somewhat, the sheep are as strong in constitution as the Wanganellas in their home in Riverina.

¶ The Burrawang wool retains its excellent name with buyers, and is always in demand at a satisfactory range of prices.

¶ The grown sheep, comprised chiefly of breeding ewes (no wethers), averaged 12 lbs. 8 ozs. of wool 1916 clip.

For Stud or Flock Rams apply to—

The Manager, Burrawang, Yarrabandai, N.S.W.

or to

The Executors of the Late C. H. EDOLS,

c/o Perpetual Trustee Company (Limited), 33-39 HUNTER STREET, SYDNEY

H. E. KATER & SON'S EGELABRA STUD, WARREN N.S.W.



EGELABRA TWO-TOOTH STUD RAM.

The Egelabra Stud is a portion of the Mumblebone Stud, and was acquired by the present owners by the subdivision of Mumblebone in 1906. The stud was founded in 1879 by H. E. and E. H. Kater, who purchased rams and ewes from the late Hon. John Smith, of Gamboola, Molong. Since that date no fresh blood has been introduced into the flock. Mr. Smith was a noted breeder. His flock was founded about 1840 from Marsden's flock of Spanish Merinos and Negrettis, specially imported from Spain. Thus it is claimed that the Egelabra Stud has maintained for 78 years that purity of blood which is so important.

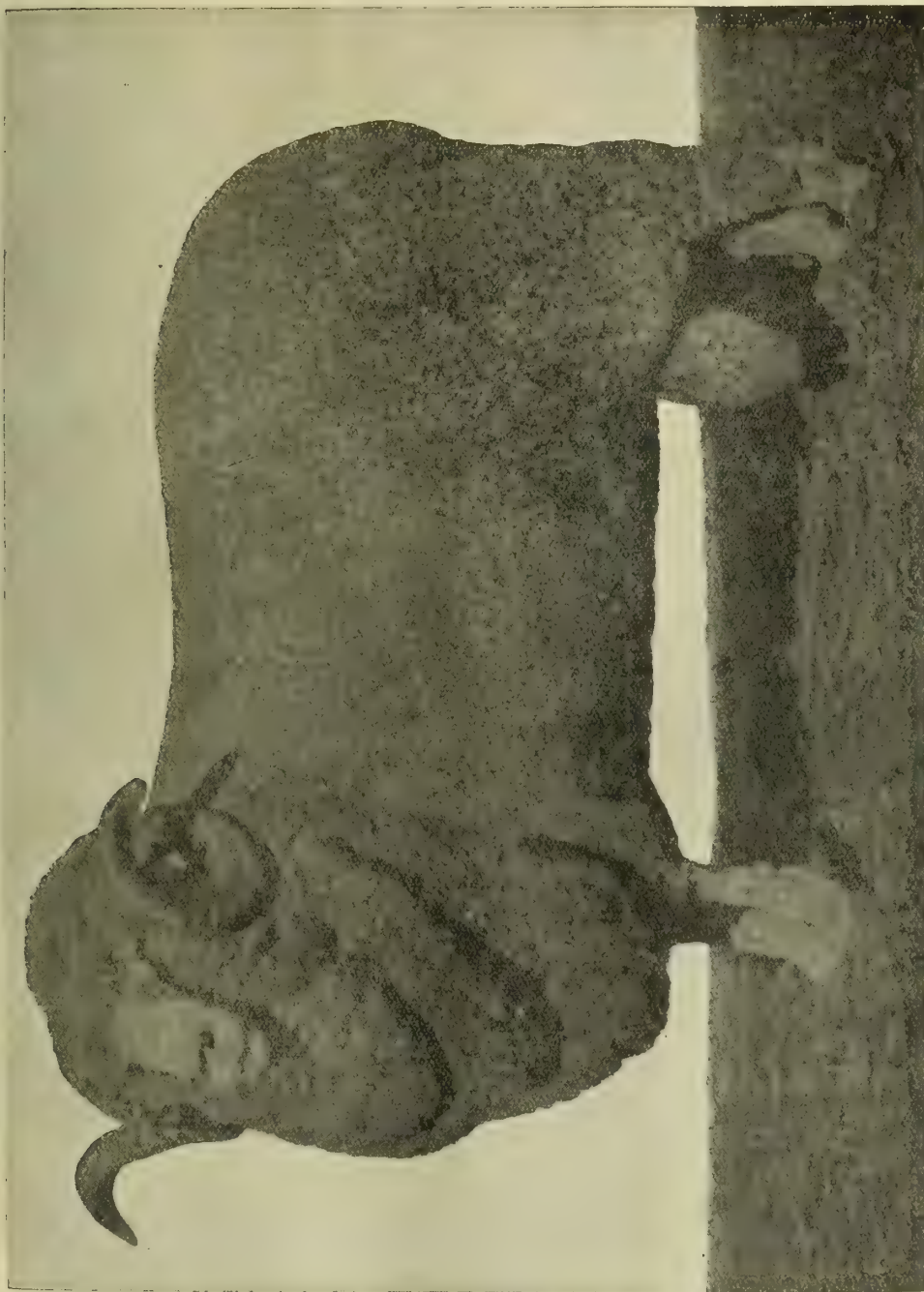
The sheep are noted for large frames, plain bodies, splendid fleeces, long staple, and magnificent constitutions. At a recent shearing the Egelabra sheep, consisting mainly of breeding ewes, cut 14 lbs. 4 ozs. of wool.

For particulars of Sale Rams apply to—

The Manager, Egelabra, Sandy Creek, Warren, N.S.W.

MUMBLEBONE STUD

Bred on Western
(N.S.W.) Salt
Bush Country.
Noted for their
robust constitution,
large frames, and
splendid fleeces of
long, strong staple.



Special Stud Ram No. 319.

For particulars sale rams apply—

KATER BROTHERS, Mumblebone, Warren, N.S.W.

Established
1879.

The WANGANELLA STUD



SPECIAL STUD RAM 17.2

Sold by Auction at the Sydney Sales, July, 1920, to Mr. Maurice Collins, of Mallett, S.A., for 700 gns. thereby obtaining the highest price at auction during the sales for two successive years by the Wanganella rams.

STUD & FLOCK RAMS FOR SALE.

For particulars apply

The Manager AUSTIN WANGANELLA CO. LTD., Wanganella, Deniliquin, N.S.W.

DALKEITH MERINOS

BOONOK BLOOD

PURELY GRASS-FED

PLAIN BODIED

The stud is under the personal supervision of Mr. F. D. McMaster, and was classed by the late Mr. J. C. Darke. The work in the future will be done by Mr. W. J. McCarthy.

Sir Alick, a son of Australia Day, took first prize for ram under 2 years at the Sydney Show, 1919. In 1920 he took Reserve Grand Champion and first prize and was sold to the Wellbongah Pastoral Company for 400 guineas.



SIR ALICK

STUD AND FLOCK RAMS FOR SALE.

Trucking Stations—Mudgee, Merriwa, or Craboon. Rams will be delivered on trucks to suit buyer's convenience.

F. D. McMASTER, DALKEITH, CASSILIS, N.S.W.

Amongst the sires used are Australia Day, Comedy King, General Grant, Young Comedy King, Young Australia, and numerous other high-class Boonoke Stud Rams. Additions made to the stud in 1918 were as follows:—10 Boonoke blood special stud ewes at 110 guineas, which took second prize Sydney Show, 1918, and 1 ditto Grand Champion at same Show at 150 guineas, all purchased from Goldsbrough, Mort & Co. Ltd., Canonbar Station; 10 special stud pure Boonoke ewes at 100 guineas each, from F. S. Falkiner & Sons Ltd.

Deniliquin Stud Park North Stud

(PURE WANGANELLA BLOOD.)

The Property of THOMAS MILLEAR.



"DONALD DINNIE"

Bred and Sold by THOMAS MILLEAR, Deniliquin Stud Park Stud, N.S.W., through Messrs. Herbert Power and Son, to the proprietors of the CANOWIE ESTATE, South Australia. Price, 1200 Guineas.

The above photo was taken at Canowie in 1908.

Since 1906 "Donald Dinnie" has sired 1056 lambs, and an immense sum has been received by the owners for his surplus progeny. His fleece has averaged 39 lbs. for the past 10 years, and now (1915), at 12 years old, he has cut 31½ lbs. of bright, lustrous wool.

Among the rams sold have been—"Donald Dinnie" (photo above), in 1906, for 1200 gns.; "Sir William," in 1909, for 1350 gns.; "Stud Park No. 10," in 1918, for 2500 gns., this latter being a world's record for a 6-year-old pure Peppin Rambouillet.

This Stud was formed in 1892 by the father of the present owner (then managing partner in Wanganella), and the classing since 1898 has been done by the owner in conjunction with his Manager, who is now in his 24th year of service.

In June, 1919, Mr. Millear transferred his Deniliquin Stud Park property, with about 4000 stud sheep, being absolutely fair samples in each grade of the 20,000 owned by him, to his son, Thomas Millear, jun., retaining for himself the property Stud Park North, Jerilderie, N.S.W., which has been worked for many years past in conjunction with Stud Park, Deniliquin. During his son's absence from Australia Mr. Millear will carry on this latter property in the former's interests.

N.B.—The sale of Wanganella Estate by the Exors. of late Thomas Millear (of which Mr. Millear was a Trustee) does not affect the Stud Park North business, as no sheep from Stud Park North were parted with, nor did Mr. Millear acquire any from Wanganella Estate for Stud Park North, excepting prior to the sale of the Estate.

INQUIRIES FOR STOCK SHOULD BE ADDRESSED TO

THOMAS MILLEAR, Edgarley, Willaura, Victoria,

or to the **MANAGER, STUD PARK NORTH, JERILDERIE, N.S.W.**

VICTORIA DOWNS STUD

MORVEN ————— QUEENSLAND.

A
Queensland
Stud
of
pure Peppin
Wanganella
Blood.



Stud Park No. 10. Purchased by Lord Bros. from Thomas Millear for 2500 gns.

The VICTORIA DOWNS MERINOS are pure Wanganella blood, being founded on rams purchased from Deniliquin Stud Park and Wanganella Estate, New South Wales, at high prices; the ewes were bought from the former property. Bred on the downs of Western Queensland, the **Victoria Downs Sheep** are noted for their exceptional constitutions and grow a fleece of very dense medium combing wool, of good length and abundant character.

Cattle—both sires and dams—chiefly Derrimuts, together with a number of imported females 41 pedigree females costing from 100 to 515 gns., and averaging 188 gns., also 34 other pedigree cows and heifers averaging 60 gns. All Herd Book registered.



Clifton Cherry Colonel, 1 year 7 months. Purchased from A. J. Simpson for 1000 gns.

Flock and Stud Rams for Sale.

Flock, 4, 6 and 8 gns.
Selected, 10 and 12 gns.
Studs from 15 gns.
upwards.

Stud and Herd Bulls for Sale.

Young Herd Bulls from
20 gns. upwards.
Young Pedigree Bulls
from 40 gns. upwards.

Foundation of both sheep and cattle studs made by the purchase of the very best animals, male and female, obtainable.

For full particulars, apply to—

LORD BROS., Victoria Downs, Morven, Q'land.

THE BUNDEMAR STUD

Inquiries
for
Stud
and
Flock
Rams
to
The Manager
BUNDEMAR
TRANGIE,
N.S.W.



**BONNIE
CHARLIE**

Sire:
Prince
Charlie
Grand Sire:
Lord Charles
G.G. Sire:
Sir Charles

BONNIE CHARLIE.

Bred by Estate late F. E. Body, Bundemar, Trangie, N.S.W. Born Nov. 1st, 1918.
Sold June 16th, 1920, to Messrs. Vermaak Bros., Stockdale, Stormberg Junction, C.P., South Africa, for Three Thousand Six Hundred Guineas.

Also bred in the Bundemar Stud	{	Prince Charlie	...	...	...	Sold to M. Collins for 3000 guineas in 1918
		Lord Charles	...	...	...	H. Collins & Co. for 2000 guineas in 1915
		Sir Charles	...	...	...	D. & W. Gibb for £1000 in 1910
		2-tooth Ewe, No. C 692	...	...	...	C. Meyer, Edenburgh, S. Af., for £250 in 1920
			...	...	...	

HADDON RIG MERINO STUD

Pure Wanganella Rambouillet.



Haddon Rig 2-Year-old Ram, "Royal Dandie," sold to A. G. Michaelian for South Africa for 1500 guineas.

A few rams of "record" quality at "reasonable" prices available each year.

FRANC B. S. FALKINER, Owner, Late Managing Director of F. S. Falkiner & Sons Ltd., 30 years Riverina experience in breeding and active station management.

Inquiries to **HADDON RIG, WARREN, NEW SOUTH WALES.**

THE WILLANDRA STUD

Property of The Willandra Pastoral Co. Ltd.
Pure Wanganella Blood.

The Willandra sheep are bred in a 14" rainfall and are entirely grass fed, possessing strong constitutions, plain bodies, with good heads and necks (which is a distinct advantage where the fly is troublesome), and long

dense fleeces of robust wool. The Willandra sheep produce a fine type of wethers, with exceptionally large frames, plain bodies, well proportioned, and most suitable carcasses for export, while at shearing yield heavy fleeces of attractive wool.



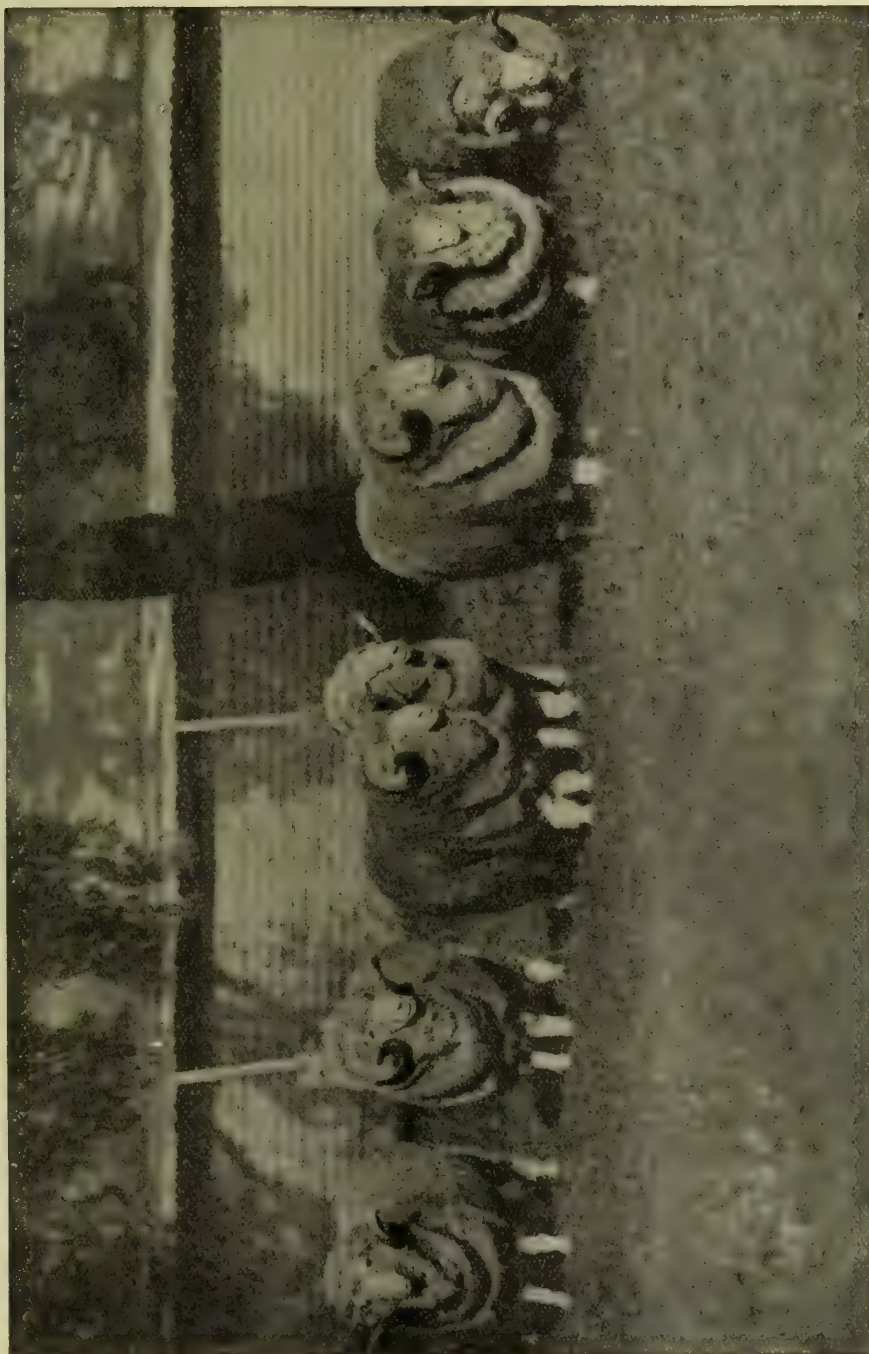
WILLANDRA STUD RAM.

Stud Rams cut up to 35 lbs. Stud Ewes cut up to 25 lbs. Flock and Stud Rams for Sale.
For particulars apply to—The Manager, Willandra Station, Booligal.

Telegrams: Hillston. Cable Address: Acumen Sydney, A.B.C. Code, 5th Edition.

The UARDRY Stud.

PURE PEPPIN BLOOD.



Group of Seven Rams sold at Auction, Sydney, July 1918, Averaged £319 10/-

Stud and Flock Rams for Sale.

Enquiries should be addressed to:—

Charles Mills (Uardry) Limited, UARDRY, Hay, N.S.W.

Telegrams to "MILLS, Uardry, Carrathool."

WANGANELLA ESTATE STUD

Property of F. S. FALKINER & SONS Ltd.



No. 955.—OPTIMIST. 3 years old.

Sold to Dr. G. E. Goddard for 1750 guineas.

Property of F. S. Falkiner & Sons Ltd., Wanganella Estate, Conargo, N.S.W.

Large frames, plain bodies, robust wool of pronounced character, good length and colour. Numerous letters of appreciation from buyers throughout the Commonwealth and South Africa.

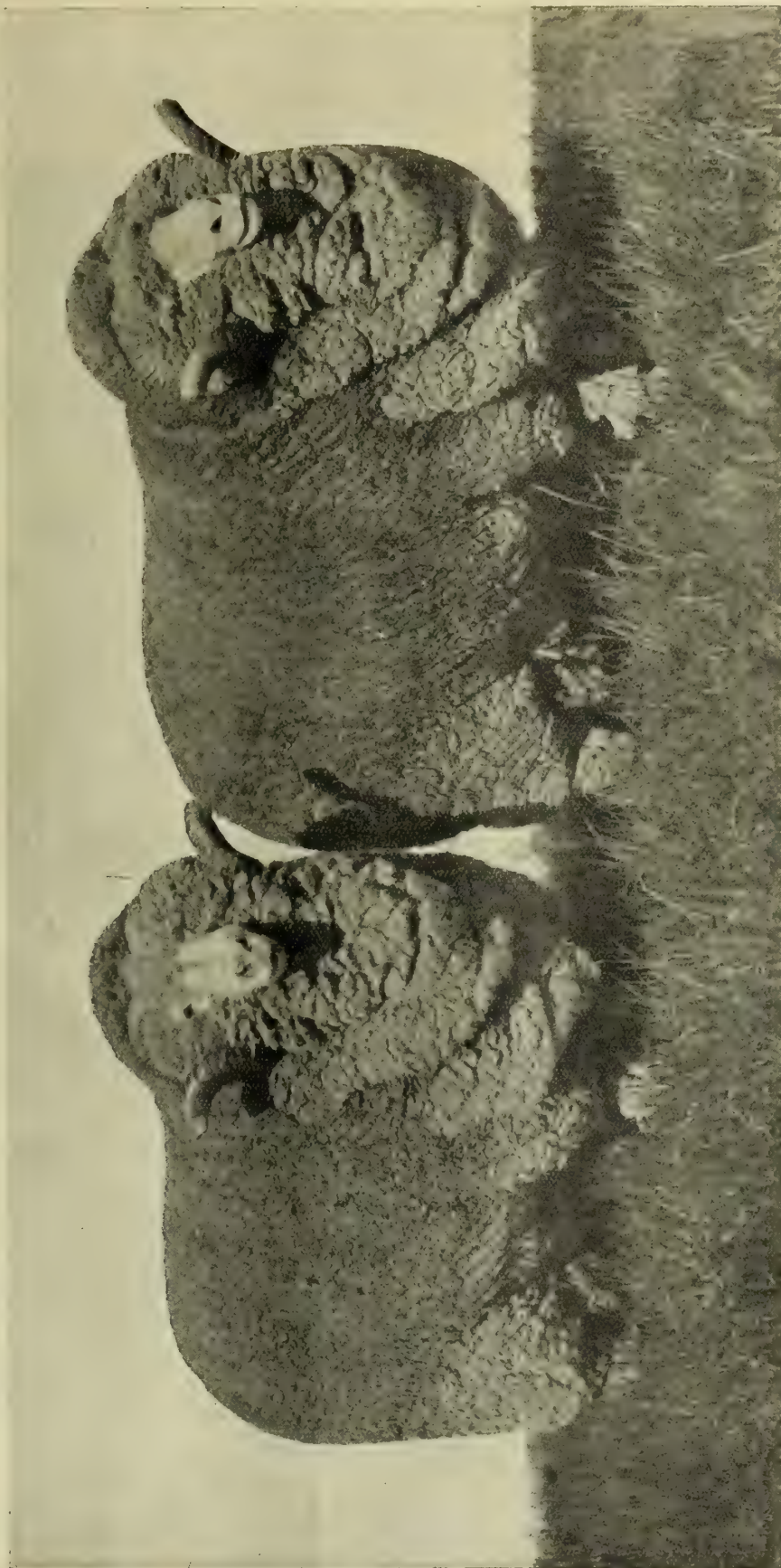
THIS STUD was formed by Messrs. Peppin & Sons in 1861, and purchased with the Station by Messrs. Austin & Milliar in 1878. This partnership terminated in 1894—Mr. Milliar then taking over his half of the property and stock, which he named **Wanganella Estate**, and conducted till his death in 1895. The Trustees carried on the business until August, 1910, when they sold the property, the whole of the pure bred **WANGANELLA ESTATE** Stud Flock, and the **GOODWILL** of the business to **F. S. FALKINER & SONS LTD.**

FLOCK and STUD RAMS for SALE, for particulars apply—

F.S.FALKINER & SONS LTD., Wanganella Estate, CONARGO, N.S.W.

BURNIMA MERINO FLOCK

A combination of the famous Murray and Koonoona blood of South Australia. Large-framed, plain-bodied sheep, cutting heavy fleeces of high-class wool. Pure Australian Merinos bred on sound lines. These sheep have given satisfaction wherever used.



4-tooth Stud Rams.—Two of the Leading Sires.

STUD AND FLOCK RAMS FOR SALE.

Apply to the **MANAGER, BURNIMA, BIBBENLUKE, NEW SOUTH WALES.**

Zara Merino Stud



Zara Stud Ram

**Stud
and
Flock
Rams
for
Sale**



Group of Zara Stud Rams

**Estate late
WILLIAM OFFICER—ZARA—WANGANELLA
New South Wales**

Boonoke Stud Merino Sheep.

PURE PEPPIN BLOOD.



A leading Boonoke Sire. Photo taken at 6 years old.

Bred by F. S. FALKINER & SONS LTD., Boonoke, Conargo, N.S.W.

Inquiries for Stock should be addressed to—

F. S. FALKINER & SONS Ltd., Boonoke, Conargo, N.S.W.
or Boonoke North, Widgiewa Siding, N.S.W.

CARWELL

MERINOS

- ☐ Pure Murgha (Wanganella) blood.
- ☐ Large frames, plain bodies, long staple wool, good colour, heavy fleeces. Entirely grass fed and sound of constitution.
- ☐ The sheep are specially suitable for South African conditions.

Stud & flock rams
for sale

SHORTHORNS

- ☐ Founded on Durham Court blood. The best strains from Victorian studs since used.
- ☐ Leading sires now in use:—
Collendina Duke of Derrimut 11th,
Chocolyn Duke of Derrimut 61st.
- ☐ Combine constitution with quality, good doers under any condition.

Stud & herd bulls
for sale

APPLY

The Manager

CARWELL—GULARGAMBONE—N.S.W.

Telegraphic Address: "Carwell, Quambone, N.S.W."

OR

CARWELL STUDS LIMITED

430 Little Collins Street—Melbourne—Vic.

WANGAMONG STUD

(See
Alternate Issues)**Consistent Drought Resisters—66 Years.
One-Man Type Flock.**

SOME (16) CONSTANT BUYERS TO DATE



—8/10/18, N.S.W.—“Hot, dry, dusty.”—“Since our Flock was changed from Wangamong, no big percentages, long, shafty wool, or big smooth wethers to sell. They were bought 12 to 15 months in advance.”

—29/10/17, South Africa.—“I told you of my record price in the grease, 31½d., pieces, 24½d.”—6 years Wangamong.

Hot, Dry, Dusty.	Cold, Wet, Snow.	Temperate	Years Used	Purchasing Years.
			6	1912, 1914, 1916, 1918.
"			17	1902, 1904, 1905, 1910, 1913, 1917
		"	6	1911, 1912, 1914, 1916.
"			13	1903, 1904, 1905, 1906, 1908, 1909, 1910, 1911, 1915
	"		6	1913, 1914, 1918, 1919.
"	"		20	1899, 1902, 1904, 1905, 1907, 1908, 1909, 1911, 1912, 1913, 1917
"			7	1907, 1909, 1910, 1911, 1912, 1913, 1914.
	"	"	7	1912, 1913, 1917.
	"		16	1904, 1906, 1908, 1909, 1913, 1919.
	"	"	25	1894, 1895, 1901, 1907, 1911, 1914, 1916, 1918.
"			6	1914, 1916, 1917, 1919.
"			15	1904, 1907, 1910, 1913, 1916.
"			13	1906, 1907, 1909, 1910, 1911, 1912, 1918.
"		"	10	1908, 1909, 1913, 1916, 1917.
"			20	1899, 1901, 1903, 1904, 1905, 1916, 1909, 1911, 1912, 1913, 1917
			7	1912, 1914, 1916, 1917, 1918.

A remarkable return (verified by 121 letters of approbation, half being since 1912), taking into consideration the many changes of opinion and ownership.

Apply { W. B. Sanger, Director, or
J. M. Sanger, Manager } **WANGAMONG PASTORAL CO., Daysdale, N.S.W.**

MULWALA MERINO STUD

Founded 1863.

Type of selected sale rams bred at Mulwala.

The flock has always been bred on the same lines, under management of James Sloane since 1877.

JAMES SLOANE & SON,
Mulwala Station, Mulwala; or Wood Park, Jerilderie, N.S.W.

THE
South Wangamong Stud Merino Flock
 Property of CHAS. D. SANGER



4-tooth Selected Flock Sale Rams.

Stud Flock founded in 1853. In 1863 ten Wanganella Stud Rams (the pick of their celebrated imported pure Rambouillet sire, Emperor's Get) were successfully introduced. Since then no other strain has been introduced into the Stud.

Average of all grown sheep (75 per cent. lambing ewes), 12 lbs. 13 ozs.

The 1915 Clip sold in Melbourne to 18½d., and Pieces to 15½d. in grease.

" 1916	"	"	"	22½d.,	"	"	19½d. "	"
" 1917	"	"	"	25½d.,	"	"	21½d. "	"

For particulars of Flock and Stud Rams apply to—

CHAS. D. SANGER, South Wangamong, Corowa, New South Wales.

"LAMARA" STUD MERINOS



STUD RAM No. 28 (2½ years.) Sire, "Lord Charles."

BREEDING.

This Stud is a portion of the "Collinsville" Stud Flock, which has recently been subdivided.

For further particulars apply to—

H. MELVIN COLLINS

"Lamara," Booborowie, Burra, Sth. Aust.

Wires: "Lamara," Booborowie, S.A.

Telephone: No. 2, Booborowie.



"SILVER CHARLES."
 Sire "Lord Charles" (cost 2000 guineas.)

The Springfield Pure Merino Stud

Goulburn

New South Wales.

**Founded in 1838 by the late W. P. FAITHFULL.
Bred since 1871 by A. LUCIAN FAITHFULL.**

These sheep are noted for their very high cutting value per fleece. Also for their hardy, strong constitutions, doing well in any climate, and growing to a great size.

The A. A. D. Pomeroy wool, bred by A. A. Dalglish from Springfield bred rams and out of ewes by Springfield bred rams for the last **ten** years, **topped** the Sydney market for greasy wool. In 1917, **40** bales realised **29d.** and **44** bales, **29½d.**

This year (1918) same A. A. D. Pomeroy wool has realised **30d.** per lb.

This year (1919) wool the progeny of Springfield bred ram again **topped** Sydney market, viz. **Lerida 30½d.**



ADMIRAL.

Bred by A. Lucian Faithfull. Weight of fleece, 29 lbs. 4 ozs. 12 months 3 days growth. Length of Staple, 4½ inches.

For further particulars apply to—

A. LUCIAN FAITHFULL,
Springfield, GOULBURN, N.S.W.

TELEGRAPH AND TELEPHONE ON.

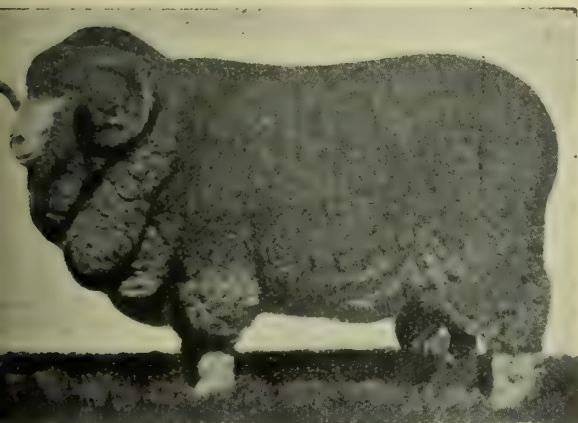


30 Special Stud Ewes, bred by A. Lucian Faithfull.
Typical style of Springfield Merinos.

Average weight of fleeces, 12 months' growth, unhoused, 18 lbs. 4½ ozs.

THE GUMS MERINOS

Large Frames—Strong Constitutions—Long Staple—Bold Fleeces



Special Stud Ram, 2½ Years Old.



Three 1½ Years Old Stud Ewes. Cut 18, 19 and 20 lbs. Wool respectively.

Founded on Murray, Koonoona and Canowie blood, the Stud is true to the pure South Australian type. Bred on saltbush country and without any pampering the sheep will stand up to the hardest conditions.

The Property of
THOMAS H. PEARSE & SONS,
The Gums—Florietown—S. Aust.

Phone—58 Kooringa

Apply—The Manager, The Gums.

Goolgumbla Stud Merinos

The property of
Mr. GEORGE STUART.

*Pure Peppin strain,
large frames,
strong constitution,
long staple.*

All the ewes in the Goolgumbla
Stud are by pure Wanganella,
Haddon Rig, and Boonoke rams
from ewes of the same blood.

For particulars apply—

**The Manager
GOOLGUMBLA,
Jerilderie,
N.S.W.**



Goolgumbla Stud Ram.

COBRAN

PURE PEPPIN BLOOD.

DENILQUIN, NEW SOUTH WALES

"COBRAN" for the
past 30 years at least
has been the premier
wool clip of Riverina,
and has with very few
exceptions topped the
market during that
period.



COBRAN 4-tooth Ram. Length of staple, 5 inches.

For full particulars apply

**C. H. BESLEY, The Olderfleet, Melbourne, Vic., or
The Manager, COBRAN, Deniliquin, N.S.W.**

The "COBRAN"
wool is noted for its
robustness, great length
of staple, excellence of
character and high
yield; the sheep are
big framed, plain
bodied, heavy cutters,
very even in type, and
have been bred on
these lines since its
inception.

WIRRA WIRRA STUD MERINOS

At MT. CRAWFORD, SOUTH AUSTRALIA.



Grazed at large on natural
grasses only.

Bred by and the Property
of MURRAY DAWSON,
Wirra Wirra, S.A.



WIRRA WIRRA, 5½ years old Stud Ram, No. 300.

MURRAY DAWSON, WIRRA WIRRA, Mt. CRAWFORD,
SOUTH AUSTRALIA.

MERRIBEE STUD FLOCK (Late Bull Plain)

MAINLY MURRAY Blood

Established 24 Years.



Extra Large Frames.

**Heavy Fleeces of long,
strong, combing Wool.**

All MERRIBEE grown sheep
averaged 13 lbs. 3 ozs. wool
with barely 12 months' growth
—Lambs averaging 5½ months
old cut 5 lbs. 2 ozs.

ORDERS BOOKED FOR RAMS.

Particulars on Application.

W. W. KILLEN
Merribee, Barellan, N.S.W.

Telegrams—
(Barellan (thence Telephone).



CASSILIS MERINO STUD



The Property of A. BUSBY.

The Cassilis flock was founded by the late A. Busby in 1829. Great care was taken in procuring the best rams then available. In the fifties, "first choice" rams were secured from Havilah. These were continued until 1868, when a very high class stud ram was brought there. Since then, the flock has been bred within itself.

The sheep are large-framed, plain-bodied and carry fleeces of high quality, density and character.

These rams have been very successful in Central Queensland.

The flock has been classed for many years by the late J. C. Darke, and is now being classed by W. J. McCarthy.

Particulars on application from:—



**THE MANAGER, CASSILIS STATION, CASSILIS, N.S.W.
or DALGETY & CO. LTD., SYDNEY.**

BARRATTA MERINO STUD.

PURE PEPPIN BLOOD.

Property of the Australian, Mercantile, Land and Finance Co. Ltd.



BARRATTA-BRED EWE AND RAMS.

(1) Champion Hand-fed or Grass-fed Strong Wool Ewe. (2) Reserve Champion Hand-fed or Grass-fed Strong Wool Ram.
(3) Champion Hand-fed or Grass-fed Strong Wool Ram.

AUSTRALIAN SHEEPBREEDERS' SHOW, 1918.

For particulars apply

**The Manager—Barratta, Deniliquin, N.S.W.,
or to**

**AUSTRALIAN, MERCANTILE, LAND & FINANCE CO. LTD.,
Sydney—Melbourne—Brisbane.**

This stud was commenced by the Company in the year 1893 on another property by the purchase of high-class stud ewes and rams from Messrs. Austin & Millear, Wanganella, and since then from time to time purchases have been made from Wanganella, Wanganella Estate Stud Park Deniliquin, Murgha and Haddon Rig.

**STUD and
FLOCK RAMS
FOR SALE**

Mendip Hills Merinos and Halfbreds

FLOCK ESTABLISHED 50 YEARS.

The Mendip Merinos gained Champion Ram and Ewe at Christchurch Show in 1903-4-5-6, and again in 1915 and 1916. Mendip Halfbreds have won the "Liston" Cup Competition for Corriedales and Halfbreds, competing together three times since its inception in 1911.

**Stud
Rams
cut
up to
34 lbs.
Wool.**



**Stud
Ewes
cut
up to
23 lbs.
Wool.**

Part of a Mob of Stud Rams Exported to Argentina at an average of 70 gns.

For particulars apply—

NORMAN RUTHERFORD, Mendip Hills, or G. L. RUTHERFORD, "Connemara," Parnassus, N.Z.

Brucedale & Curranyalpa Merino Stud Flocks

Brucedale Stud, established 1850. Now consists of Peppin blood ewes bred at Curranyalpa, rams in use from Bundemar, Uardry, Boonoke, and Urangeline.

For particulars apply to—

**H. C. SUTTOR,
Brucedale, Peel,
New South Wales.**



Curranyalpa Stud. Peppin blood from Boonoke, Bundemar, and Wanganella bred rams and ewes. Rams now in use from Lucernedale, Haddon Rig, and Uardry. Big, strong, hardy, plain body sheep, bred on the dry salt bush plains of the Darling for years.

For particulars apply to

**CLAUD H. SUTTOR,
"Mia Mia,"
Purlewaugh, via
Coonabarabran.**

Special Stud Ram "DANDY," 4 years old.

Bred at Curranyalpa. Cut 31 lbs. wool hand shorn, September, 1920, 12 months' growth.

NALPA STUD MERINOS

E. C. & J. L. STIRLING, South Australia.

The flock is one of the oldest established in the State, and a noted prizetaker in both **SHEEP and WOOL.**

NALPA secured all champion prizes for Merino wool at the allotted Royal Show, Adelaide, 1914 to 1918. Also first and special prizes for two best rams' fleece, Melbourne Royal, 1919.

STUD AND FLOCK RAMS FOR SALE.

Apply to **Manager, Nalpa Langhorne's Creek, South Australia**

Telegrams: Fullarton, Wellington, E.



No. 4-1—Double Reserved Champion, Australian Sheep Breeders' Association, Melbourne, 1917. Sold to Geo Seiberhagen, South Africa, for 1000 guineas. Out fleece 34 lbs.

THE GUNDARY PLAINS MERINO STUD



STUD RAM JUPITER.

The Gundry Plains Stud Ewes were originally purchased from the stud flocks of Messrs. Litchfield, Cooma, and A. Lucian Faithfull of Goulburn. Stud Rams were purchased from the above flocks, and from Boonoke, to mate with the above ewes. The aim of the flock has been to produce a robust, plain-bodied, strong-wool sheep, and they are noted for their heavy fleeces of strong combing wool.

For further particulars apply to—

A. R. MAPLE-BROWN,

Gundry Plains, Goulburn, N.S.W.

WYAMBEH CORRIEDALE STUD

The property of

John A. Sloane, Wyambeh, Mulwala, N.S.W., and

John A. Sloane & Co. Ltd., Neyliona, Carrathool, N.S.W.

Flock Founded 1882 by H. J. Corbett. Lincoln Merino Blood only. When exhibited have always proved successful, winning Champion Prizes 1918, 1919, 1920 at the Australian Sheepbreeders' Association Show. Registered Australian Corriedale Sheepbreeders' Association.

For Particulars of Rams for Sale apply—

JOHN A. SLOANE, Wyambeh, Mulwala, N.S.W.



WYAMBEH Two-year-old Stud Ram.

TEVIOTDALE REGISTERED CORRIEDALES

The Drought Resisting Breed

These Sheep have been bred on the Teviotdale Estate for 38 years, and are the heaviest clipping Corriedales in the Dominion.



TEVIOTDALE CHAMPION RAM.

They are guaranteed to breed Absolutely True to Type.

They have been under the charge of the originator since the inception of the flock

Experience with these sheep during the recent drought at Tocal Station in Western Queensland, proves them to be ALL BUT DROUGHT RESISTING.

Where Merinos died, THE CORRIEDALES SURVIVED.

The recent successes of this flock comprise:—

At the Panama Pacific Exhibition

Reserve Champion Ewe

First and Second Prizes for Ram Lamb. First and Second Prizes for aged Ewes. First, Second, and Third for Yearling Ewes. Second for Yearling Ram. (No aged ram from this flock was exhibited.)

Corriedale Wool is the best for Khaki

In the wool section at the Panama Exhibition, Teviotdale wool was the admiration of all experts, and secured the following awards: 1 gold medal, 2 silver medals, 1 bronze medal.

There is no doubt that the Corriedale is the future general purpose sheep for highest quality of wool and mutton.

At the scouring competition last November Teviotdale sheep again gained first place for heaviest fleece.

Rams and Ewes for sale in quantities

G. D. GREENWOOD (Originator of the Breed), Teviotdale, Amberley, New Zealand

"The two most profitable general utility breeds."

Corriedale Sheep

for constitution, carcase, big lambings and bulky fleeces of even type and high value.

The Corriedale Park Stud, Wagga Wagga, New South Wales (Australian Corriedale Breeders' Association Flock No. 1), founded in 1882 by mating Stud Merino rams and Stud Lincoln ewes, inbred ever since, an outcross obtained by the introduction of the very highest grade of Stud rams, mainly from the N.Z. and Australian Land Company's

Moeraki Stud, New Zealand (founded in 1874).

During the past five years sheep from the Corriedale Park Stud have taken over 100 first and 20 Champion Prizes at Australian Sheepbreeders' (Victoria), N.S.W. Sheepbreeders' (Sydney), Melbourne Royal, Wagga Wagga, Albury, and Hamilton Shows.

RAMS cut from 15 to 25 lbs. wool. EWES cut from 10 to 15 lbs. wool. Pen Pure Corriedale Wethers sold in Melbourne Sale Yards at £5 per head. Wool grown in Riverina appraised Geelong, 1917, at 23½d. per lb.

NOTE.—Inspection of original letters from purchasers from all over Australia invited.

It pays to have the best.



Corriedale Rams, Ewes, Lambs, and Wethers.

Bred by, and the property of, J. F. GUTHRIE, Corriedale Park, Wagga Wagga, N.S.W.

500 Pure Rams (Poleys) of 1919 drop, for delivery at from 5 guineas upwards.

Red Polled Cattle



FLIGHT COMMANDER, 21 months, by Belligerent (imp.) ex Birdseye.

The most prepotent breed—splendid milkers, ready fatteners to heavy weights.

The Stud at Corriedale Park was secured from Mr. Ben Osborne, of Redbank, Harden, New South Wales—all imported or descended from high-class imported cattle.

The young stock are by **RENDELSHAM ELECTOR** (imp.)

Sire now in use **FLIGHT COMMANDER** by **BELLIGERENT** (imp.)—Dam, the famous cow, **BIRDSEYE**.

Pedigreed bulls for sale at from 40 guineas upwards.

APPLY J. F. GUTHRIE, Geelong, Vic., OR ANY AUSTRALIAN STOCK AGENTS.

THE WHITE ROCK CORRIEDALE STUD FLOCK

THE NEW BREED OF THE NEW CENTURY.

Wool clip equal in value to the best Merino flocks.

Mutton and Lamb the finest quality grown in Canterbury.

Robust constitutions and an up-to-date sheep.

Weight of fleece up to 28 lbs.

Corriedale wool highest price in New Zealand markets.



Corriedale Stud No. 1-18, sold in Sydney July 1920.

Grand Champion Sydney, 1920.

A GREAT COMBINATION OF WOOL AND MUTTON.

Champions International Show, 1906.

Champions, Rams and Ewes, Canterbury Metropolitan Show, 1910.
Champions at Launceston and Hobart Shows, 1910-1911, bred
from this flock.

Grand Champion, Sydney, 1920.

Stud Rams and Ewes delivered at any port in the world.

Recent Exportations have been made to all the States in Australia,
South Africa, America, British East Africa, all parts of New
Zealand, and other places.

Flock Established 1889. Registered N.Z. Flock Book.



Two Corriedale Stud Rams sold in Sydney
July 1920.

VARIOUS SHOW RECORDS INCLUDE—

PANAMA EXHIBITION, U.S.A. — Champion and
Reserve Champion Rams, Champion Ewe. Also other
prizes. Gold and silver medals for wool (fleeces).

SYDNEY SHEEP SHOW, N.S.W. — Grand Cham-
pion Rams and Ewes 1915. Many other prizes.

BRISBANE EXHIBITION, Queensland. — Champion
Rams and Ewes 1915. All other prizes.

NEW ZEALAND SHOWS. — Champion Ram Ashbur-
ton Show, also Stringfellow Memorial Cup. Champion
Ram Nelson Show. Champion Ewe Rangiora Show.
Many prizes Christchurch Show, including the Corrie-
dale Cup for most valuable combination of wool and
mutton, single ram, also the Quibell Cup for best aver-
age value three rams. Half-breds competed for this
also. Different teams of sheep competed at each of
these Shows. Practically all were sold 1915. Reserve
Champion and other prizes, Christchurch, 1919.

PROGRESS.

The greatest invention in modern Sheep Farming is the Freezing
Industry. The Freezer opens to the Sheep Farmer the Meat
Market of the whole world. Before only Wool could reach the
World's Markets.

PROGRESS.

To-day it is most profitable to grow sheep which combine the wool
value of the Merino and the meat value of the British Breeds.

THE CORRIEDALE REPRESENTS PROGRESS.

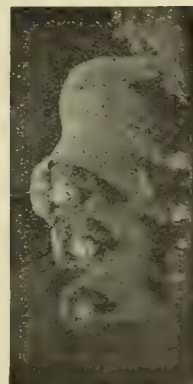
FLOCK AND STUD RAMS FOR SALE.

For Particulars apply to

C. H. ENSOR, White Rock, Rangiora, N.Z.

OR TO YOUR AGENTS.

Note the bold appearance,
denoting constitution.



Note the evenness of type
these sheep show.

BUSHEY PARK CORRIEDALES

(Registered).

Foundation: Lincoln—Merino.

This flock was founded by the purchase of over 1000 specially selected studs at the dispersal of Mr. Leonard White's famous flock (No. 9, N.Z.F.B.)

CONSTITUTION.

Note the shape of these sheep. They have robust constitution and large symmetrical frames, as well as heavy fleeces.

WOOL.

The wool is a dense, shafty, true halfbred, and is noted for its excellence of character and length of staple.



PREPOTENCY.

Having been carefully line-bred for many generations, the whole flock shows a strong family likeness and fixity of type. The rams are consequently extremely prepotent, having the power of impressing their characteristics on their progeny.

SHOW YARD RECORD.

The Canterbury Agricultural and Pastoral Show, held annually in Christchurch, is the "Mecca" for Corriedale sheep in New Zealand. For many years Mr. White's sheep have been great prize takers. His latest achievement was the winning of the Championship Gold Medal for Ram, and the Corriedale Cup for most points in rams in 1919.



STUD & FLOCK RAMS FOR SALE.

For particulars apply to

WRIGHT, STEPHENSON & CO. LTD., Stud Stock Salesmen. P.O. Box 462. Dunedin, N.Z.

or The Proprietor.

J. A. JOHNSTONE, Bushey Park, Palmerston South, N.Z.

The Rakahuri Corriedale Flock



Champion Corriedale Ram, Rangiora, 1915.
Bred by Hugh Ensor.

By HUGH ENSOR, Rakahuri, Rangiora, Canterbury, New Zealand.

One of the best quality and heaviest
woolled flocks in New Zealand.

Established the record price of
19¼d. for Corriedale Greasy
Fleece Wool at the Christ-
church sales, Nov. 11th, 1915.

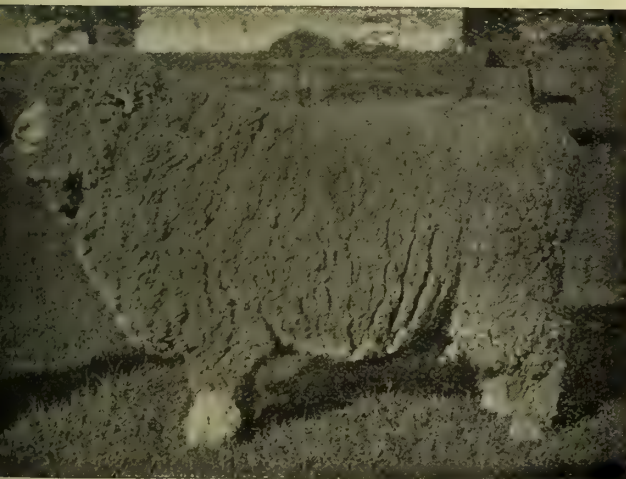
For shape and constitution the
Rakahuri sheep cannot be sur-
passed. Winners of many prizes.
Flock established 1889. Registered
N.Z. Flock Book.

STUD and FLOCK RAMS FOR SALE.

For full particulars apply to—

DALGETY & CO. LTD.

The N.Z. & A.L. Co.'s Corriedales



4-tooth Ram.
Champion and winner of two Specials, Christchurch Show, 1915.

The Company's flocks are No. 1 and No. 2 in the New Zealand Flock
Book, and are the oldest in existence. Show-yard successes during the
last 10 years have been very numerous, and include in that time 10
championships at Christchurch, the premier show for the breed in
New Zealand.

The New Zealand and Australian Land Company's New Zealand
Corriedale Flock originated at the Levels Estate in Canterbury in 1874,
when Mr. W. S. Davidson, the present General Manager, put 1000
specially selected Merino Ewes to Lincoln Rams, and their progeny,
kept absolutely pure, now number over 6000 Ewes. The Flock was
kept at The Levels until that property was resumed by Government
in 1904, when part of the Corriedales was sent to Hekataramea, in
Canterbury, and the remainder to Moeraki, in Otago, since which the
purity has been strictly maintained.



4-tooth Ram.
Champion and winner Silver Shield, Christchurch Show, 1917.

STUD and FLOCK RAMS FOR SALE.

APPLY TO THE
New Zealand and Australian Land Co. Ltd., DUNEDIN.

The Eurella and Wairoa Corriedales



The flocks are direct descendants from 800 ewes purchased during 1904-5, and a subsequent purchase from the N.Z. and A. Land Co.'s Corriedales (1. 1 N.Z. Flock Book), established in 1874 and thus the oldest in existence.

Origin Lincoln-Merino and no other blood ever introduced.

All rams used in these flocks have been from the parent flock or bred by owners.

Registered in Australian Corriedale Sheep Breeders' Association
Flocks Nos. 15 & 16.

Following previous successes, at the 1919 Sydney Sheep Show these flocks practically "swept the pool," taking all First, Reserve and Champion Prizes.

Stud and Flock Rams For Sale. Guaranteed to breed true to type.

For particulars apply to— **D. MACFARLANE, Eurella Estate, Rylstone, N.S.W., or
MACFARLANE BROS., Wairoa Estate, Narrabri, N.S.W.**

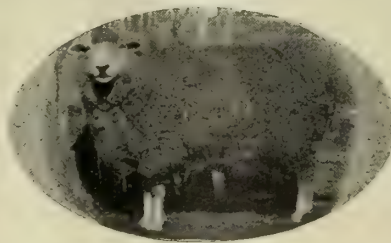
Cardington Stud of Romney Marsh Sheep

Some Photos of the leading sires from 1903 to 1920, showing a continuity in type.



NUGGET I.

Sire Elham Jumbo (imp.). Reg. 13361. Vol. X., K. or R.M.F.B., dam Elham ewe (imp.), No. 81 of 1903. Reg. 194, Vol. XI. Leading sire, 1909, 10, 11 and 12.



ACTIVE I.

Reg. 21. Vol. 1. Leading sire, 1903, 4 and 5.



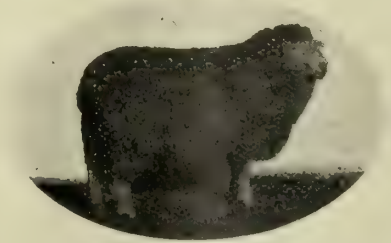
ELHAM JUMBO (imp.)

Reg. 13361. Vol. X. K. or R.M.F.B.
Leading sire 1906, 7, 8, 9 and 10.



ELHAM STANDARD I.

Dalry 20 of 1915. Sire Elham 98 of 1912 (imp.), dam Dalry ewe 16 of 1913, by Elham 104 of 1910 (imp.). Winner Sires Memorial Cup, Melbourne Royal, 1919. Leading sire 1918.



ELHAM CHALLENGER.

Dalry 48 of 1916. Sire Elham 98 of 1912 (imp.), dam Dalry ewe 12 of 1914 by Elham 67 of 1910 (imp.). One of the leading sires 1919.



ELHAM STAMP I.

Dalry 68 of 1916. Sire Elham 104 of 1912 (imp.), dam Dalry ewe 16 of 1912 by Elham 104 of 1910 (imp.). One of the leading sires 1918, 19, 20. Sold to Davidson Bros., S.A. at 100 guineas.

THE Cardington Romneys, founded in 1903, were added to in 1905 by the importation from C. FILE, of Kent, of the Ram Elham Jumbo and Elham Ewes—40 of 1903, 10 of 1903, 64 of 1903, 81 of 1903, 104 of 1903, 112 of 1903, 60 of 1903, 12 of 1903, in lamb to Windsor 63rd and Windsor 71st. Since which date no Ewes, except those of Elham strain, have been added to the stud, and only imported English Rams, or their progeny, have been used—principally of Elham strain. Individual pedigrees have been kept since 1903, and every Ewe and Ram retained in Stud have been registered individually in A.L.S.A. Flock Book.

Rams and Ewes of the Elham Strain for Sale.

Apply to—

GEORGE F. DOYLE, Cardington Hall, MOLONG, N.S.W.

New Zealand Romney Marsh Sheep Breeders' Association

(Incorporated)

THE attention of Flock Owners in Australia is drawn to the merits of the New Zealand Romney Sheep. The stud flocks of the Dominion can supply your demands for rams and breeding ewes.

Romneys hold the World's Championship.

Correspond with the Association for full particulars.

The Secretary, P.O. Box 40, Feilding, New Zealand.

GROONGAL STUD, N.S.W.

The property of R. S. FALKINER.

English Leicesters Shorthorns.

For particulars apply—
The Manager.

Telegrams:

GROONGAL, CARRATHOOL.

Postal:

GROONGAL, S.W. RAILWAY, N.S.W.

WHITE ROCK MAINS CORRIEDALE STUD FLOCK

CANTERBURY, NEW ZEALAND.

Pure bred for over 40 years.

WOOL AND MUTTON

Leading stud Corriedale flock masters of New Zealand are using these rams, and the progeny of the flock are continually winning leading prizes at the chief shows in the Dominion at which Corriedales are shown.

RAMS FOR SALE

For full particulars apply—

M. MACKINTOSH, White Rock Mains, Rangiora, Canterbury, N.Z.

OR DALGETY & CO., CHRISTCHURCH, N.Z.



Pair of First Prize Corriedale Ram Hoggets

BOLARO ROMNEYS

Registered Aust Longwool Sheepbreeders' Association, Flock No. 23.

THE PROPERTY of S. M. OSBORNE.

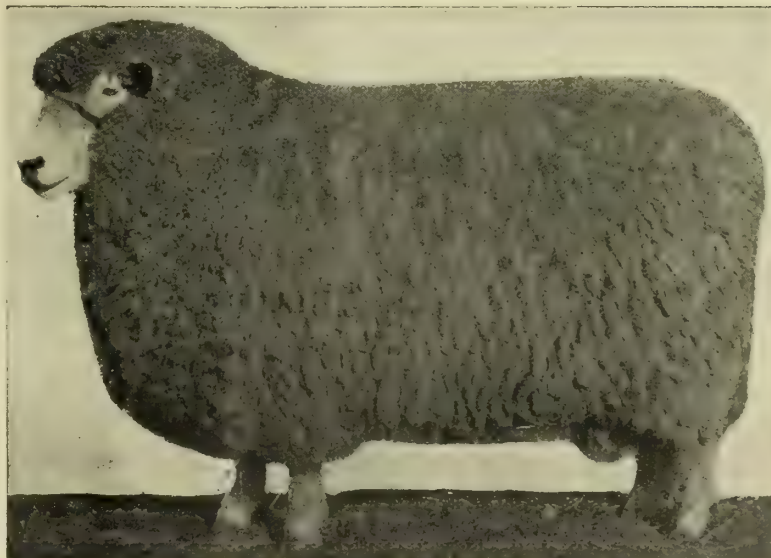
Raised on high country and **grass-fed**. Noted for **great constitution and very heavy, dense fleeces**.

The following prizes were won at the N.S.W. Sheepbreeders' Show, 1919 (the largest show of the kind in Australia):—Champion Ram, Reserve Champion Ram. 1st and 2nd prizes for ram over 2 years, 1st and 3rd prizes for ram over 1 year and under 2 years, 2nd prize for ram under 12 months. Reserve Champion, 1st and 3rd prizes for ewe over 2 years and under 2 years. 1st, 2nd and 3rd prizes for ewe under 12 months old, 1st and 3rd prizes for pen of 2 rams under 12 months old, 1st prize for pen of 2 ewes under 12 months old.

STUD and FLOCK RAMS always on Sale at reasonable prices.

For further particulars apply—

RANK FILE, "BOLARO," COOMA, N.S.W.



BOLARO No. 15 of 1916.

1st and Champion of N.S.W. Sheepbreeders' Show, 1919.



MAJESTIC. Station bred.

Willigobung Romney Stud

REGISTERED FLOCK NO. 25 A.L.S. ASSOCIATION.

Founded 1910 from imported stock. Elham and Short blood and individual records kept. Bred on high basaltic country on natural grasses only, and are famed for their constitution and wool wherever introduced.

For further particulars apply—

J. W. CUNINGHAM, COURABYRA, N.S.W.

Hilstead Romney Marsh Stud.

Combines the best English, New Zealand, Victorian and New South Wales Blood.

The Stud was founded by the purchase of fifty ewes and one ram—Cardington Supreme 1st—from the registered flock of Mr. Geo. F. Doyle, Cardington Hall, Molong, N.S.W., and by the purchase of the stud ram Egerton No. 77 of 1913 from the well-known registered flock of Mr. A. J. Hickman, Court Lodge, Kent. The flock has been from time to time added to by importations of the best English blood, five ewes from the flock of Mr. R. S. Strouts, Kent, in lamb to well-known registered rams, 10 ewes specially selected by A. Chapman (Secretary Kent or Romney Marsh Association), three special stud ewes from Mesham Flock, Kent, two ewes and one ram from the flock of Mr. A. J. Hickman, Kent. Further additions have recently been made from the flocks of Mr. A. J. Hickman, Mr. S. M. Osborne, Bolero, N.S.W.; three prizewinners from Mr. A. E. T. Payne, Yarraview, Lilydale, Victoria; Messrs. V. H. and W. H. Yelland, Treverder, Newlyn, Victoria; Mr. Thomas McDowall, Brightside, Braidwood, N.S.W., and Mr. Geo. F. Doyle, Cardington Hall, Molong, N.S.W.

STUD AND FLOCK RAMS FOR SALE.

For particulars apply **J. B. SAUTELLE, Hilstead, Bibbenluke, N.S.W.**

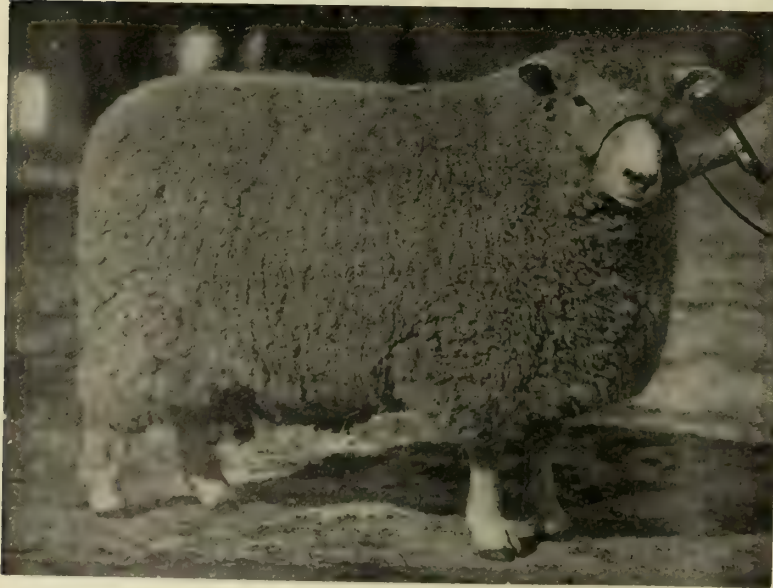


3 SPECIAL STUD EWES from the MESHAM FLOCK, KENT.

WILLEROO ROMNEY MARSH STUD

REGISTERED IN THE AUSTRALIAN LONGWOOL SHEEPBREEDERS' ASSOCIATION FLOCK BOOK (FLOCK NO. 29).

The property of PAT. OSBORNE, Willeroo, Tarago, N.S.W.



Willeroo Ram No. 46 of 1915.

1st Prize and Reserve Champion at the Royal Show, 1917, 1st Prize at the N.S.W. Sheepbreeders' Show, 1917, and Grand Champion at the Melbourne Royal Show, 1918.

The Willeroo Rams also made the highest average price at the Sydney Stud Sheep Sales—an average of £56 17s., the highest average for Longwool Sheep in Australia.

THIS Flock was founded in 1910, and now comprises 1100 Stud Ewes. The Ewes purchased for this flock are from the registered flocks of Mr. J. E. Quested, Kent, England; Mr. W. F. Jacob, New Zealand; Mr. G. F. Doyle, Molong, N.S.W., and from the late Mr. James Gibbs' flock, which was all pure Elham blood. Rams purchased for this Flock from England—in 1915 three from Mr. J. E. Quested, in 1916 two from Mr. Quested, one being the Champion at the Ashford Show and a First Prize Ram at the Royal Show, England; and one in 1916 from L. H. and G. W. Finn—this ram won the Championship for Wool at the Ashford Ram Show in 1916. Prizes won by this Stud in 1916, 1917, 1918 and 1919 at the Sydney and Melbourne Shows:—7 Grand Championships; 3 Reserve Championships; 38 First Prizes; 26 Second Prizes; 17 Third Prizes; and 3 First Prizes for Wool.

The Willeroo Romney Marsh Cross have also won First Prizes four years following, competing against all breeds at the Sydney Sheep Shows, as follows:—

First Prize for Pen of ten Fat Wethers for Export
First Prize for Pen of ten Fat Wethers, judged on Commercial Value.

First Prize for Pen of ten Fat Wether Lambs, judged on Commercial Value.

Stud and Flock Rams always on Sale.

Full Pedigrees of all Stud Sheep are Kept.

FOR FURTHER PARTICULARS APPLY TO—

D. A. WHITE, Stud Manager, Willeroo, Tarago, N.S.W.

THE CARR'S PLAINS IDEALS

The IDEAL Sheep are finer in the wool than the Crossbred. They have been bred rather towards the Merino, and the fibre is more of the character usually yielded by a Comeback. This accounts for the high price obtainable for the clip, and gives it an unique character. The Carr's Plains Ideals are

AUSTRALIAN BRED SHEEP FIXED TYPES

They cut the same weight of wool as ordinary Merinos and get the same price, but they realise more per head for the whole fleece because they cut much more fleece wool and less skirtings than the Merino; also the carcase is bigger and returns more than Merinos.

For fuller particulars and samples of wool, write to:—

H. H. WETTENHALL AND SONS

Carr's Plains, via Stawell, Vic.

WELLINGTON LODGE STUD South Australia.

Merino Sheep.

Pure bred for 60 years. Founded on Learmonth blood, and later Canowie, Wanganella, and Murray blood.

A few selected and flock 1918 rams for sale.

Shorthorn Cattle.

Pedigree Shorthorns of Angas, Derrimut and imported blood.

A few young bulls and heifers for sale.

Thoroughbred Horses.

Colts and fillies from yearling upwards, by Kerlie and Iownit, usually a few of each for sale.

Apply—

ALLAN McFARLANE, Wellington Lodge, East Wellington, S.A.,
BENNETT & FISHER, Bowman Buildings, Adelaide.

PENROSE STUDS of Pure Bred LINCOLN & ROMNEY Sheep.

Registered in the Lincoln Sheep Breeders' Association's Flock Book and the N.Z. Romney Association's Flock Book.



RANGATIRA V.
Lincoln Ram bred by Wm. Perry

ANNUAL SALE
is held during 3rd week in
January of each year.

For particulars
apply:—

Wm. PERRY, Penrose, Masterton, N.Z.

The Romney flock was founded from the flock of Mr. A. Matthews, more particularly through that great sire Premier I., who was the sire of Premier 267. Premier 267 has a very successful show record, only being beaten on one or two occasions and then by his flock mates. His sons have made record prices for N.Z. Romneys.



CHANCELLOR IV.
Romney Ram bred by Wm. Perry.

WARRAH MERINOIS

The Property of
The A.A. Co.

The Warrah Sheep are plain bodied, large framed and carry heavy fleeces.

For particulars apply THE MANAGER, WARRAH STATION, Willow Tree, N.S.W.

Streanshalh Corriedales



WHITE ROCK.
Bred at Streanshalh and winner of five championships and many first prizes.

Registered Flock No. 3.

Founded in 1904 on the importation of 41 pure ewes and one ram from C. H. Ensor's White Rock (N.Z.) Stud, since when only the purest rams have been introduced.

The stud has been very successful at leading shows in Tasmania, while the wool from flocks that have used Streanshalh rams usually commands record prices in the Tasmanian market.

Stud and Flock Rams for Sale.

Apply the owner—

NORMAN NICOLSON,
Streanshalh, Macquarie River, Tasmania.



Grand Champion Corriedale Ram, Sydney, 1920. Purchased subsequently by N. Nicolson.

COLLENDINA SHORTHORNS.

The Property of Henry Hay & Son.



Foundation
Cows
purchased
from
Bolinda Vale.

Valuable
Young
Stock
for
Sale.

COLLENDINA DUCHESS OF DERRIMUT 21st.

By Collendina Duke of Derrimut 11th out of Collendina Duchess of Derrimut 8th.

COLLENDINA CORRIEDALES

Pure Corbett Blood.

(Registered Flock No. 12, Australian Corriedale Sheepbreeders' Association.)

For particulars apply **HENRY HAY & SON, Collendina, Corowa, N.S.W.**

COOMBING PARK SHORTHORNS



BOLINDA DUKE OF DERRIMUT 400th.

Founded on high-class female stock of Lee and Lowe blood. Extensive purchases of pedigreed cows have also been made from the studs of the late James Holmes, Bathurst; Sir Rupert Clarke, Bolinda Vale; and Mr. Norman Falkiner, Noorilim, Victoria.

The bulls now in use are from
Bolinda Vale.

**STUD AND HERD BULLS
FOR SALE.**

THE WHITNEY PASTORAL CO., Coombing Park, CARCOAR, N.S.W.

BARRAGAN STUD AND HERD

No pampering — All grass fed — Rich colours.

50 Years of careful breeding.

THE BARRAGAN HERD was founded nearly 50 years ago by the late E. Tindale, by the purchase of choice cows from the stud of the late Thos. Lee, Woodlands, Bathurst, and at the clearing sale of W. and J. Lee, of Millbank, Bathurst, whose cattle were descended from the original stud of Wm. Lee, Claremont, Bathurst. Sires used were from the studs of S. Gardiner; Robertson Bros., Colac; J. H. Angas, and the choice of John Lee of Bylong's bulls. Duchess females were also secured from the McCulloch dispersal sales.

The present owner purchased the above foundation, and has since added from the last McCulloch dispersal other females of the Persis (imp.), Lobelia (imp.), May Rose, Lady Weston, and Charmer strains; also the imported bull Prince Millicent (96519).

Bulls now in use were prize winners in large classes at Royal Sydney and Royal Melbourne Shows—Lord of the Vintage and Mabonga's Comet.

**Stud and herd bulls eligible for entry
in the herd book for sale.**



PERSIS VII.

Also pure pedigreed Berkshire pigs and Lincoln rams (registered flock).

The property of

R. S. HARRIS, BARRAGAN, BARRAGANDAH, VIA MUDGEES, N.S.W.

Telegrams—WOLLAR.

HAMBLEDON HILL SHORTHORNS

Pure Derrimut blood and imported stock



SIRES.

Bolinda Duke of Derrimut 392nd and Bolinda Duke of Derrimut 425th, both directly descended from Lindenow Duke of Derrimut 40th.

COWS.

From Bolinda Vale, Rathfarnham, Clifton, and Dugdale and Creber's Studs, Vic.; Estate late James Holmes, Bathurst, N.S.W.; Te Aute Stud, N.Z.; besides English imported females.

A few females 12 months to 3 years for sale. All entered or eligible for entry in S.H.B. of A. Vol. 2.

Full particulars from

Lloyd Jones, Hambledon Hill, Singleton, N.S.W.

BINNIA DOWNS SHORTHORNS



BARITONE

Champion Shorthorn Bull, Sydney Royal, 1918; 1st and Champion, Sydney Royal, 1920, and Governor-General's Cup; 1st and Champion, Melbourne Royal, 1920, and winner of Gold Medal awarded by the Shorthorn Society of Great Britain and Ireland. Bought for 1,700 guineas. Now being used in the Binnia Downs Stud.

THE FEMALE STOCK ARE AN EXCEPTIONALLY HIGH-CLASS LOT.

STUD AND HERD BULLS FOR SALE.

For particulars apply—**J. McMASTER, Binnia Downs, Coolah, N.S.W.**

Founded in 1908, and built up on the best blood procurable from leading Victorian studs—J. E. Robertson, Glen Alvie; A. J. Simpson, Clifton; John James, Derrimut; Ball Bros., Zaretan; A. J. Webb, Rathfarnham; N. Falkiner, Noorilim, etc.

The following additions to the stud were made by purchase at the Sydney Royal Show, 1918:—

Stud Bull BARITONE, 2 years 7 months, at 1,700 guineas, from Messrs. Parsons & Robertson, Watch Hill, Vic.

Stud Bull HIGHTON DUKE OF DERRIMUT, 12 months old, at 1,000 guineas, from Messrs. Lidgett Bros., Vic.

Stud Heifer ROYAL JESSAMINE 89th, at 400 guineas, from Messrs. Parsons and Robertson, Vic.

Stud Heifer DUNDAS DUCHESS OF DERRIMUT 13th, at 400 guineas, from Mr. A. J. Simpson, Clifton, Vic.

Edgecote Filbert (imp.) 1075 gns. **Rose of Chedglow** 51st (imp.) C.H.B. Vol. 65.

Bianca Belle 9th (imp.) C.H.B. Vol. 64.

Hilda Warden (imp.) C.H.B. Vol. 64. **Alkbank Undine** 4th (imp.) C.H.B. Vol. 64.

"MILTON PARK" SHORTHORNS

A FEW
YOUNG
STOCK
FOR
SALE.



MASTERKEY (imp.)

For particulars of Stock For Sale, apply to—

The Manager, "MILTON PARK," Bowral, New South Wales.

"Masterkey,"
sire of
the winning
female
group at the
Royal Show,
of England,
1920.

LYNDHURST STUD, WARWICK, Q.



LYNDHURST ROYAL PEER.

Champion Bull, Brisbane, 1912-13-14-15-16-17; Toowoomba, 1914-15-16-17; Warwick, 1911-12-13-14-15-16-17.

MURWEH, Charleville, Q.

THE MURWEH SHORTHORN STUD was formed in 1917, 400 high-class cows and heifers being sent there from Dulacca West with a number of high-class stud bulls, Lyndhurst bred, many of them prize takers, also the New Zealand bull, Diamond Crest. On the western country these cattle have done exceptionally well. The young bulls now for sale at Murweh are a very fine lot.

Stallion—Hartfell. Ayr Laddie ex Light Heart, 10 gns.

NOW FOR SALE—Murweh:—500 Bulls, Lyndhurst, Dulacca West and Murweh bred, 2 and 3 years old. For particulars apply—

E. McDOUGALL, LYNDHURST, WARWICK, Q.; or McDOUGALL & CO., WARWICK, Q.

Pure Shorthorn Stud and Herd Bulls

Combining robust constitutions with depth of flesh and quality. The Sires used in the Lyndhurst Stud have all been prize winners and include Bapton's Patriot (imp.), Clippers Duke (imp.), Hampton Bowling (imp.), and Clogher Augustus (imp.). First Sydney and Champion Brisbane. The Sires now in use are Lyndhurst Royal Peer (winner of 13 Champion prizes, including 5 Brisbane Champions), Clogher Augustus (imp.), Lyndhurst Royal Peer 11th (4 Firsts Brisbane and Reserve Champion), 3rd Duke of Ettrick, and Lyndhurst Royal Peer 13th.

The cows are mostly direct descendants of 4 cows imported by the late Hon. J. D. Macansh in 1875, and include 25 cows selected from Mr. Baldwin's Durham Court stud in 1913.

The Lyndhurst cattle have been very successful at the Queensland National Association Show, Brisbane, having won 7 Championships with bulls and 4 with cows during the last 12 years, also any number of class and group prizes.

STALLIONS.

Chantemerle (imp.) Polymelus ex Amphoraria	...	...	...	50 gns.
Serenomond (imp.) Desmond ex Serenata	...	...	...	30 gns.

DULACCA WEST STUD, Roma, Q.

THIS SHORTHORN STUD was formed in 1904 with 100 Lyndhurst Stud cows and has since been added to each year from Lyndhurst Stud; also includes purchases from Baldwin's Durham Court Stud. The sires in use are all high class and mostly prize takers.



ZARETAN DUKE OF DERRIMUT 22nd.
Purchased at the 1917 Sydney Royal Show for 460 guineas, and is now used in the stud

GRAMPIAN HILLS SHORTHORN STUD

The Property of A., R., and F. BOWMAN,
Grampian Hills, Bunnan, New South Wales.

This stud was started in the early forties, and its purity has been maintained ever since by the use of the best bulls procurable.

At the Sydney Royal Show, 1918, Grampian Duke of Derrimut 6th was sold for 950 guineas.

STUD BULLS & COWS & HERD BULLS FOR SALE.

For full particulars apply to

A. BOWMAN, 279 George Street, Sydney,
or to the Manager, Grampian Hills, Bunnan.

THE JERULA SHORTHORN STUD

THE PROPERTY OF

COLIN CAMPBELL, Jerula, near Cowra, New South Wales

THE COWS of this Stud have been bred up from the Stud of the late JOHN LEE of Bathurst, and have been successful prizetakers.



NYINGAY WIDE 5th (at 23 months). Realised 400 gns. R.A.S. Sydney Sales, 1916.

Purchased by Mr. Colin Campbell, of Jerula, Cowra, N.S.W.
Bred by Mr. Roy Simson Mungadal, Hay, N.S.W.



"MOOKI ROTHERFIELD"
Now in use at Mooki Stud

R. R. DANGAR.

Mooki Springs Shorthorns

**HIGH-CLASS STUD and
HERD BULLS FOR SALE.**

APPLY **THE MANAGER,**
Mooki Springs, Quirindi, N.S.W.

The Nyngay Shorthorn Stud

THE PROPERTY OF

ROY SIMSON, Mungadal, Hay, N.S.W.

This stud was formed in 1902, and has been continuously selected for the production of sorts that are robust and deep fleshed.

Stud and selected bulls usually
for sale; also heifers.



NYINGAY SUMMERTON 7TH (Grass-fed) One of the stud sires.

CLIFTON STUD Shorthorns

Old Established Herd of High-Class Shorthorns.

Carefully bred for constitution, quality and early maturity. Winners of many Champions and numerous other prizes at Sydney, Melbourne and Brisbane Shows. Where young sale stock command top prices.

A. J. SIMPSON, CLIFTON, HAMILTON, VICTORIA.



A Noted Clifton Stud Cow
BOLINDA DUCHESS OF DERRIMUT 400th.



DIAMOND FAIRY.—1 & R.C. Hastings, 2, Imerston N., 1916; 1. Hastings, 2 & R.C. Imerston, 1 & C., Carterton, 1 & C., Wanganui, 1917; 1 & C., Masterton, 1 & C., Marton, 1 & R.C., Hastings 1 & C., Carterton, 1 & R.C., Imerston N., 1 & R.C. Feilding, 1918; 1 & C., Marton, 1 & C., Taihape, 1, Hastings, 9, and winning sire with progeny.

BLAIR ATHOL STUD SHORTHORNS

First-Class Stud and Herd Bulls for Sale.

*Write for
Particulars*

DALZIELL BROS.,

Hunterville, North Island, New Zealand.



2-YEAR AND 3-YEAR HEIFERS.

Belmont Park Stud RED POLLED CATTLE

Herd established 1891.

Stud bulls, heifers, and herd bulls for sale. All herd bulls are pure bred.

Price, from 35 guineas.

Inspection invited.

Apply—**Philip Charley, Richmond, N.S.W.**



Honingham Astrologie (imp.) 10,303.



NEW YEAR'S GIFT. 18 months old.

Bred at Gracemere. Sire, Prince Regent 534. Dam, Fancy 215.

GRACEMERE & TORSDALE STUD HERDS

Shorthorns. Herefords. Red Polls.

HIGH CLASS BULLS FOR SALE.

Bred on Red Water Country and inoculated for Pleuro.

ARCHER BROS. Ltd., Gracemere, Qld.



“The Hereford is the only breed for our ranching conditions”——

Says a distinguished South African Visitor.

MR. ALLISTER M. MILLER, President of the South African Cattle Breeders' Association, has been in Australia for some months buying stud Herefords for his ranch in Swaziland. Mr. Miller leaves no doubt as to his opinion of the Hereford.

“It is the only breed for our conditions,” he says. “We want an animal that will stand hardship, and at the same time mature early. Hereford blood gives us that—the kind of Hereford blood that I find here in Australia. You have wonderful Herefords here and you can count on a big market in South Africa.”

Mr. Miller, and Mr. E. W. Evans, another Hereford breeder who accompanied him, over and over again expressed their pleasure at the quality of our cattle. They have purchased 42 stud animals for shipment to South Africa.

The Secretary will supply the names of Hereford breeders, on request.

Australian Hereford Society

303 Queen Street, BRISBANE.



A great Herd, with a
wonderful Sire—
"PRESIDENT WILSON,"
3494 (imported),
purchased at 2220 Guineas—
at its head.

Bushy Park Stud of HEREFORD CATTLE

This Herd is now composed of a small but very select group of magnificent Cattle, every individual in which is first-class. In fact, it may safely be said without the slightest exaggeration that in no part of the world could they be excelled.

Possessing as they do the great advantage of being reared under natural conditions, absolutely without housing or forcing—even those which are being prepared for Showing being left out at night—it will readily be seen how valuable they must be for breeding good sound-constituted stock. None but long-pedigreed animals are kept in this Herd.

Efforts are now being made to secure shipping for stud stock from New Zealand to South America, which will no doubt be arranged within the next year or so, and it behoves all Hereford breeders to place themselves in a position to take advantage of this great market.

There are now available for private sale at Bushy Park the following high-class Bulls at very reasonable prices:—

Two two-year-old Stud Bulls by "Rufus" (imp.)

A grand selection of Stud Yearling Bulls by "Rufus" (imp.): "Elect 19th," "Maymorn" and "Count Rufus."

And this season the first crop of calves by "President Wilson" (imp.) will make their appearance.

There is also a splendid lot of two-year-old Run Bulls and a few Run Yearlings, all of which have been handled and tied up.

For Further Particulars apply to:—

FRANK MOORE

BUSHY PARK, KAI IWI
WANGANUI, NEW ZEALAND.



BELLE VUE HEREFORDS.

The Estate of the late JAMES GIBSON, BELLE VUE, EPPING, Tasmania.



ROSADOR.

Bred by Henry Beattie & Sons, Vic. Sired by Royal Duke, dam, Lady Roseberry 2nd. Purchased by the Trustees James Gibson Estate in 1908.



BELLE VUE ROSADOR 4th.

Three years old. Bred by Trustees James Gibson Estate. Sired by Rosador, dam, Lady Betty. Was Champion Hereford Bull at the principal Tasmanian Shows in 1918 and 1919.

BELLE VUE MERINOS

Belle Vue is the home of the famous Sir Thomas flock. All Belle Vue sheep are descended from Sir Thomas and the same original lot of pure ewes.

FOR PARTICULARS APPLY—

THOMAS MUIRHEAD, The Manager, BELLE VUE, EPPING, Tasmania.



LADY PRESIDENT 8th.
2 weeks old.

LADY PRESIDENT 4th.
3 years 11 months old. Weighed 1615 lbs. at Aug. 1913 Brisbane National with Lady President 7th as calf at foot and she took 1st prize then as cow 2 yrs. and under 3 yrs.

ISIS 2nd.
1 year 8 months old.

LADY PRESIDENT 7th.
1 year 1 week old.



9-month-old Bull Calves

High-class Stud and Herd Bulls for sale.

All females and bulls used in the herd are entered in the Herd Book.

Herd established nearly 50 years.



9-month-old Bull Calves.

CRESSBROOK HEREFORDS

Apply to—

EDGAR C. McCONNEL,
Cressbrook, Toogoolawah, Q.

RAMORNIE HEREFORD STUD HERD

Founded on stock from the famous Gunyan Stud.

Stud and Herd Bulls for sale.

All Herd Bulls are pure bred, only Stud Book Bulls and Cows used.

Apply:—

C. H. TINDAL, Ramornie, Copmanhurst, N.S.W.



COMMODORE 2nd. By MAGNITUDE (imp.)
At the age of 2 years and 3 months.



"LOVELACE" (imp.)

1st Royal Show, Cardiff, Wales, England, under 12 months 1919.

Mrs. C. Lumley Hill.

BELLEVUE STUD HEREFORDS

Bellevue, Queensland

Composed of Pedigree Cows with pedigrees running back ninety years in Stud Books, including such famous Championship Sires as:—"Field Marshal," "The Admiral," "Lord Clare," "Lloyd George" and "Lovelace" (imp.), bred by Sir John Cotterill, Bart., Carnons, Herefordshire, England. Best class Pedigree Stud Bulls and Herd Bulls for sale by Stud Book Sires from England, New Zealand and Southern Colonies.

Apply to THE MANAGER, Bellevue, Q'land.

The MICALAGO Stud

**The property of the Executors
of the late Hon. A. Ryrie, M.L.C.**

The Micalago Hereford Stud is founded on Stud Bulls and Heifers purchased from the noted breeders, Messrs. S. Reynolds, "Duninald," Patterson, N.S.W., P. Reynolds, "Hobartville," Richmond, N.S.W. The Stud is noted for robustness of constitution, bred and reared 2301 ft. above sea level.

In 1920, the "Hereford Stud" gained two (2) Champion Prizes, nine (9) Firsts, one Second at Southern Shows, and, in a field of 36, in the class one year and two, at the Royal Jubilee Sydney Show, Third Prize with "Paris," by "Monte Carlo" 3rd, No. 732 A.H.B., Dam, "Spot" 13th, Vol. 6, A.H.B.



MONTÉ CARLO 3rd.
No. 732, A.H.B.

Inspection invited, apply

The Manager, "MICALAGO," Michelago, N.S.W.

EAST TALGAI ABERDEEN ANGUS STUD

strong, Akitio, N.Z., and Proud Peer of Tolarno, bred by the late W. C. Grubb, of Tasmania, both of which are now in use in the stud. The herd at present consists of about 70 breeding cows with a fine lot of heifers coming on. Numerous prizes have been taken at the Brisbane Exhibition and other Shows in Queensland.

The East Talgai Aberdeen Angus Stud was formed some years ago by the importation of 8 high-class cows and a bull from the leading studs in New Zealand. In 1917 the whole of the Boolarwell, Queensland, stud of pure cows was purchased and since then two high-class stud bulls have been secured at high figures, viz., Mahoe of Akitio, bred by F. Arm-



"Proud Peer of Tolarno."



"Scottish Queen," Imported from New Zealand.

The 1919 drop of bull calves will be ready for sale towards the end of this year.

Apply **GEORGE C. CLARK**, East Talgai, Elinthorp, Queensland.

GUNYAN HEREFORD STUD HERD.

STUD & HERD BULLS FOR SALE

All Females are eligible for Entry in A.H.H.B.

Stud Bulls in use at present—

Magnitude (imp.), winner Championship, Brisbane, 1918, Rosador 2nd (First Prize, Sydney), Wonder 3rd (First Prize, Sydney), Sir Edgar (First Prize, Sydney), Lord Lyndley (First Prize, Brisbane).

Apply to

TINDAL & SON, Gunyan, Texas,
via Inglewood, Queensland.



MAGNITUDE (imp.)

LYNDLEY HEREFORDS

Founded on Reynolds, Beattie & Imported Stock.

All herd bulls are pure bred, only Stud Book bulls and cows used.

Lyndley Herefords exhibited since 1913 on 7 occasions and have won 8 Championships, 11 Reserve Championships, 58 firsts and 35 seconds, and hold the Australasian record price 1125 gns.

Stud bulls and heifers for sale. Also pure herd bulls.

Inspection Invited.

Apply **JAMES SPARKES, LYNDLEY, JANDOWAE, QUEENSLAND**



MANSEL BANNER PRINCE (imp.) 37,357 E.H.B. Age 1 year 3 months.
Now used in Lyndley Stud.

"ABBEY GREEN" STUD & HERD HEREFORD & DEVON CATTLE

The "Abbey Green" Hereford and Devon Herds were founded by the purchase of bulls and cows from the best herds in New South Wales and South Australia in 1908. Only best bulls procurable used since.

The cattle are noted for their hardiness, being bred 5000 feet above sea level, and mature very quickly when taken into hot climates.

YEARLING STUD AND HERD BULLS FOR SALE

Full particulars from **H. W. CURTIS, "Abbey Green," Llangothlin, N.S.W.**



"Curley" 96, aged 4 years. Used in Abbey Green Hereford Stud, 1918-20



EATON CONQUEROR, (IMP.)

Aged 2 years 2 months. Live weight, 1820 lbs

Hobartville Stud

Hereford Cattle. ♂ Thoroughbred Horses.

High-class Stud Stock for Sale. Inspection Invited.

Apply **PERCY REYNOLDS, Hobartville, Richmond, N.S.W.**

BENVENUE STUD HERD OF HEREFORD CATTLE.

Established at "Benvenue," Singleton, N.S.W., in 1873.

The **W.W. BRAND** is well known in Queensland.

IMMUNE.



LANSDOWNE (imp.). 2 years 5 months

**STUD & HERD BULLS
FOR SALE.**

All herd bulls are pure bred.
Inspection invited.

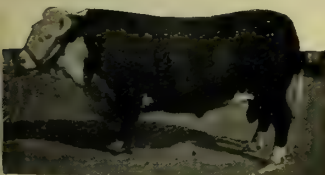
**H. H. WADDELL,
Benvenue,
GAYNDAH, Q'LD.**

DUNINALD Stud and Herd.

HEREFORD CATTLE.

Stud Bulls and Heifers for Sale; also Pure Herd Bulls. All Herd Bulls bred at Duninald are pure bred. Inspection invited.

Correspondence should be addressed—**S. REYNOLDS, Duninald, Paterson, N.S.W.**



"CUTMORE"—1st Prize Grand Champion, R.A.S., Sydney, 1911.

GISBORNE PARK STUD HEREFORDS

English Leicester and Corriedale Sheep

THE HEREFORD STUD was founded 1869 from imported stock. Noted for robustness of constitution, heaviness of flesh and true-ness of type. Bred and reared nearly 2000 feet above sea level.

The whole Stud has been tested with Tuberculin, and found sound and free from Tuberculosis.

THE ENGLISH LEICESTER STUD was founded 1908 on the good old New Zealand blood. Noted for their hardy constitution and early maturity.

THE CORRIEDALE STUD was formed 1920 on ewes personally selected from leading New Zealand Studs. Famous for wool and mutton. The utility sheep.

J. A. BEATTIE

GISBORNE PARK

Phone 13 — GISBORNE



ROYAL BOY 4TH. Stud Sire at 3 years.

CONDELL PARK

HEREFORD CATTLE. BERKSHIRE PIGS.

Cows are culled heavily every year, and only the best bulls used.

All herd bulls are pure-bred, and eligible for entry in the Australian Hereford Herd Book.

The pigs are noted prize-takers at the R.A.S. Sydney Show.

**STUD and HERD BULLS. INSPECTION INVITED.
STUD PIGS FOR SALE.**

Apply

A. L. HARRIS, CONDELL PARK, MALDON, N.S.W.



CORNCRAKE (Imported), aged 9 years and 8 months.

The Gwavas Herd of Aberdeen-Angus Cattle

NEW ZEALAND

The Property of Mr. A. S. G. Carlyon.



Stud Bull, Quality of Maisemore (Imp.)

ADDRESS:

The Manager, Gwavas Station,
Tikokino, Hawkes Bay, N.Z.

Telephone and Railway: Waipawa.

This herd, which is noted for good constitution and freedom from disease, has lately been improved by importations from the herds of Lord Rosebery; Kerr of Harviestoun; Kennedy of Doonholm; Cridlan of Maisemore Park, Gloucester; and Elliott of Duns.



Stud Cow, Pure Pride of Dalmony (Imp.)



Imported Polled Angus Bull, Carolus of Mulben.

EDINGLASSIE POLLED ANGUS STUD

The property of White Bros., Edinglassie, Muswellbrook, N.S.W.

THIS Stud is founded and built up on blood imported from the best herds in Great Britain regardless of cost, and has been so maintained for the last 20 years.

Young Bulls for Sale, delivered on rail at Muswellbrook.

Further particulars on application to

White Bros., Edinglassie, Muswellbrook, N.S.W.

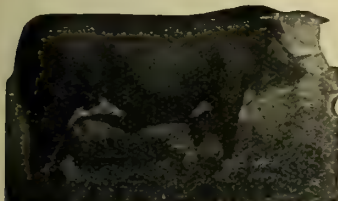
The Cannobie Lea Aberdeen-Angus Herd

Founded from one of the best strains and noted for constitution.

Orders can now be booked for Calves (Period 1920).

Inspection Invited. Homestead situated 5 miles from Palmerston North.

J. F. KNIGHT, Newbury, Palmerston North, N.Z.



"WONDER."

Stud Bulls and Heifers for sale; also Pure Herd Bulls.

All Herd Bulls bred at Tocal are perfectly pure bred, which gives them a great advantage over the ordinary grade bulls.

Inspection invited.

Correspondence should be addressed—

TOTAL Stud and Herd.

Hereford Cattle

and THOROUGHbred HORSES.

The Oldest Herd in Australia.
Established at Tocal in 1844.

Estate F. REYNOLDS, Tocal, Paterson, N.S.W.

MANSEL COURT STUD HERD.

THREE FIRST-PRIZE WINNING YEARLING BULLS

From a pen-and-ink sketch by
Frank Calderon, R.A.

Reading from the left: MANSEL BANNER MASTER (37354), 1st prize Royal Show, 3rd prize Worcester; MANSEL BANNER GUARD (37350), 1st prize Royal Counties Show; MANSEL BANNER REX (37359), 1st prize Bath and West, 1st prize Hereford and Worcester Agricultural Society's Show.

Four first prizes have thus been won by three different bulls from one herd—a record.

Apply to—

CAPTAIN R. T. HINCKES,
Mansel Court, Hereford, England.



A. J. HICKMAN & Co.

Halse Grange,

Brackley, Northants.

Cables:

HICKMAN, BRACKLEY, ENGLAND.

The largest Purchasers of Pedigree Live Stock for Export in Great Britain. Illustrated Pamphlets and Testimonials on application.

GARNONS HEREFORDS

The property of

**Sir J. R. G. Cotterell, Bart., Garnons, Hereford,
England.**

ROYAL FAME, v. 51, at 9 months. Sire Sovereign 35628, dam Queen Elizabeth by Administrator 27298. Bred by Sir J. R. G. Cotterell, Bart. Sold at a high price to Senor Rodriguez, Uruguay.

During the last 20 years the Garnons Herd has won some 200 Champion and other prizes at all leading Breed and Fat Stock Shows in England. Stock Bull Saladin 31957, sire of Sovereign 35628: 1st and Champion Herefordshire and Worcestershire A.S.; 1st and Reserve Champion Royal Agricultural Soc., Cardiff; 1st Lord Tredegar's Newport, and sold for 4,000 gs.; Lovelace, 1st Royal Agri. Soc.; Minstrel, 1st Royal Counties, Reading; Steer, 1st Smithfield Club.

Catalogue of Herd on application.



ROYAL FAME at 9 months.

Amateur Kodak enlarged.

R. C. FIELD

Westfield

Westbury

Tas.

Shorthorn Stud

Founded on pure stock purchased from the Van Diemen's
Land Co. about 1840. Only best blood used since.
STUD AND HERD BULLS FOR SALE.

BAROONA SUFFOLK PUNCHES

Known all over Australia.

Colts rising 3 years for sale.

Apply:—The Manager, BAROONA, WHITTINGHAM, N.S.W.



BAWDSEY VOLUNTEER.
Bred by Sir Cuthbert Quilter, Bart., M.P.
Champion Royal Sydney Show. 1912.

FIRST ANNUAL SALE AT DUNEDIN EARLY IN 1922.

SCOTTISH CLYDESDALE SIRES, G. SIRES, G.G. SIRES of

Thomson's Famous Wai-Rongoa Stud, N.Z.

in their authenticated respective breeding positions as the best breeding Clydesdales of their time in the world.

FROM 1905 TO 1918.

1905.

- 1st—Baron's Pride.
- 2nd—Hiawatha.
- 3rd—Royal Favourite.

1906.

- 1st—Baron's Pride.
- 2nd—Hiawatha.
- 3rd—Royal Favourite.
- 4th—Baron's Buchlyvie.

1907.

- 1st—Baron's Pride.
- 2nd—Hiawatha.
- 3rd—Everlasting.
- 4th—Baron's Buchlyvie.
- 5th—Royal Favourite.

1908.

- 1st—Baron's Pride.
- 2nd—Hiawatha.
- 3rd—Baron Buchlyvie.
- 4th—Everlasting.
- 5th—Royal Favourite.
- 6th—Sir Hugo.

1909.

- 1st—Baron's Pride.
- 2nd—Hiawatha.
- 3rd—Revelanta.
- 4th—Baron Buchlyvie.

1909—continued.

- 5th—Royal Favourite.
- 6th—Silver Cup.
- 7th—Sir Hugo.

1910.

- 1st—Baron's Pride.
- 2nd—Hiawatha.
- 3rd—Baron Buchlyvie.
- 4th—Everlasting.
- 5th—Oyama.
- 6th—Revelanta.
- 7th—Royal Favourite.
- 8th—Sir Hugo.

1911.

- 1st—Baron's Pride.
- 2nd—Hiawatha.
- 3rd—Baron Buchlyvie.
- 4th—Everlasting.
- 5th—Oyama.

1912.

- 1st—Baron Buchlyvie.
- 2nd—Baron's Pride.
- 3rd—Everlasting.
- 4th—Hiawatha.
- 5th—Revelanta.
- 6th—Apukwa.
- 7th—Royal Favourite.
- 8th—Oyama.

1913.

- 1st—Baron Buchlyvie.
- 2nd—Apukwa.
- 3rd—Baron's Pride.
- 4th—Hiawatha.
- 5th—Royal Favourite.
- 6th—Bonnie Buchlyvie.
- 7th—Revelanta.
- 8th—Oyama.
- 9th—Scotland Yet.

1914.

- 1st—Baron Buchlyvie.
- 2nd—Apukwa.
- 3rd—Dunure Footprint.
- 4th—Baron's Pride.
- 5th—Hiawatha.
- 6th—Revelanta.
- 7th—Scotland Yet.
- 8th—Everlasting.
- 9th—Auchenflower.
- 10th—Oyama.
- 11th—Royal Favourite.
- 12th—Bonnie Buchlyvie.
- 13th—Sir Hugo.
- 14th—Silver Cup.

1915.

- 1st—Baron Buchlyvie.
- 2nd—Dunure Footprint.

1915—continued.

- 3rd—Apukwa.
- 4th—Bonnie Buchlyvie.
- 5th—Hiawatha.
- 6th—Baron's Pride.
- 7th—Revelanta.
- 8th—Royal Favourite.
- 9th—Scotland Yet.

1916.

- 1st—Dunure Footprint.
- 2nd—Baron Buchlyvie.
- 3rd—Apukwa.
- 4th—Bonnie Buchlyvie.
- 5th—Baron's Pride.
- 6th—Everlasting.
- 7th—Hiawatha.
- 8th—Royal Favourite.

1917.

- 1st—Dunure Footprint.
- 2nd—Baron Buchlyvie.
- 3rd—Apukwa.
- 4th—Bonnie Buchlyvie.

1918.

- 1st—Dunure Footprint.
- 2nd—Baron Buchlyvie.
- 3rd—Bonnie Buchlyvie.
- 4th—Apukwa.

THE BROOD MARES AND STALLIONS.

Baron's Brilliant, imp. (by Baron's Pride by Sir Everard by Top Gallant).

Silver Cloud (by Silver Cup by Baron's Pride by Sir Everard by Top Gallant).

Lady Buchlyvie, imp. (by Bonnie Buchlyvie by Baron Buchlyvie by Baron's Pride by Sir Everard by Top Gallant).

Pride of Trowan (by Baron Buchlyvie by Baron's Pride by Sir Everard by Top Gallant).

Molreen (by Oyama by Baronson by Baron's Pride by Sir Everard by Top Gallant).

Choicest Queen (by Scotland's Choice by Revelanta by Baron's Pride by Sir Everard by Top Gallant).

Bonnie Queen (by Scotland Yet by Royal Favourite by Royal Gartley).

Ena III. (by Royal's Brilliant by Royal Favourite by Royal Gartley).

White Rose (by Drumflower by MacGregor by Darnley).

Ena (by Ascot by MacGregor by Darnley).

Lady Alston (by Revelanta by Baron's Pride by Sir Everard by Top Gallant).

Agatha (imp.) GVLC (by Imperialist by Hiawatha by Prince Robert by Prince of Wales).

THE STUD STALLIONS.

Newton Chief, imp. (by Up To Time by Baron's Pride by Sir Everard by Top Gallant).

Sir Thornley (by Sir Hugo by Sir Everard by Top Gallant).

Dunure Fabric (by Dunure Footprint by Baron Buchlyvie by Baron's Pride by Sir Everard by Top Gallant).

Bonnie Breastknot (by Bonnie Buchlyvie by Baron Buchlyvie by Sir Everard by Top Gallant).

Roquhan Kennedy (by Apukwa by Hiawatha Prince Robert by Prince of Wales).

Scotland's Success (by Scotland Yet by Royal Favourite by Royal Gartley).

Wintersuegh (by Montrave Mac).

Scotland's Viceroy (by Scotland Yet by Royal Favourite by Royal Gartley).

The First Annual Sale takes place, without reserve, at Dunedin early in 1922. Look for fresh information in the next issue, and notify any of our branches throughout the world if you are going to attend, so accommodation, luncheon, &c., may be arranged.

DALGETY & CO. Ltd., Auctioneers.

Cheviot Rams.

For Weight and Quality of Wool and for Mutton, combined with hardiness of constitution and activity, the CHEVIOT is outstanding. CHEVIOTS and their crosses have for years held leading positions in the Smithfield Carcase Competitions.

The Cross with the Merino is becoming more popular every year. Full particulars supplied by the Auctioneers, who will execute Commissions through a Shipping Agent.

**Andrew Oliver & Son, Auctioneers,
HAWICK, SCOTLAND.**



Shearling Ram, "Millknowe Victory," which made the Record Price of £620 at our 1919 Sale.



Oxford Down Yearling Ram. First prize winner at the Cardiff Show of the Royal Agricultural Society of England, 1919.

Oxford Down Sheep

The Oldest Registered Flock.

Individual Pedigree of every sheep. Owned by Hugh Stilgoe, The Grounds, Adderbury, Banbury, Oxfordshire, England. The sheep of the present and the future. Unequalled as a pure breed, or for crossing purposes. They combine beautiful wool, with the best of meat, and will thrive in every part of the world. Many First and Champion prizes. Show Record 1919:—Royal Agricultural Society of England's Show at Cardiff, First and Second Prizes for Yearling Rams, First and Second Prizes for Wool. Birmingham Show, First and Second Prizes for Lambs. London Show, First and Second Prizes and Breed Cup for Lambs.

Telegrams :—"Stilgoe, Adderbury."

The Sheep which sells to-day is the

Suffolk Sheep

Record after Record at Recent Sales. Demand from all Parts of the British Isles.



Ten Two-tooth Ewes sold for £500 (a record for ewes of any breed), Champion Pen Society's Sale. Champions over all Breeds, London Smithfield Show, 1919.

Special Sales at Ipswich July, August and September.

For Full Particulars and Expert Selection apply to:—

THE SECRETARY, SUFFOLK SHEEP SOCIETY, 25 MARLBOROUGH ROAD, IPSWICH, ENGLAND.

SOUTHDOWN SHEEP.**UP-TO-DATE SUCCESSES.**

CHAMPIONS OVER ALL BREEDS AT THE GREAT LONDON (SMITHFIELD) FAT STOCK SHOW in 1916, both alive and dead; also Champion Carcase at Chicago International, 1916, 1917, and 1918. Earlier successes too numerous to record



SOUTHDOWN WOOL is of the finest quality and texture, and realises more per pound than any other English wool.

SOUTHDOWN MUTTON is the best the world produces, and always commands the highest price.

SOUTHDOWN EWES possess the hardest of constitutions, enabling them to thrive well in all climates, situations and soils.

SOUTHDOWN RAMS produce by far the best and most profitable carcasses for the British trade, either pure or crossed with any other breed.

CARCASE COMPETITIONS—Smithfield, 1916, Southdowns won First and Champion for pure-bred sheep, and sired the First and Reserve Champion cross-bred lamb. At Chicago, 1916, 1917, and 1918, all carcase prizes went to Southdowns or Southdown crosses, including the Championships. They are unrivalled as mutton producers.

Special Auction Sales in August and September at Chichester (Messrs. Stride and Son) and at Lewes (Messrs. J. R. Thornton & Co).

Apply to the Secretary, SOUTHDOWN SHEEP SOCIETY, 12 Hanover Square, LONDON, ENGLAND, or to the Auctioneers above-mentioned.

SOUTHDOWN SHEEP

Unsurpassed for Fine Quality of both Mutton and Wool.
CHAMPIONS AT SMITHFIELD SHOW, 1916.

GREAT PRIZE SALE

(Under the auspices of the Southdown Sheep Society)

10,000 Registered Southdown Ewes and Rams,
At Chichester, Sussex, ABOUT AUGUST EACH YEAR.

Auctioneers:

STRIDE & SON, Chichester, Sussex, England

who will execute Commissions.



A typical pen of Yearling Southdown Ewes

Oldport Flock & Shorthorn Herd.

Ryeland Sheep Flock No. 11, and Bates Cattle
of Good Families,

With Scale, Good Coats, and Dark Colours.

RYELAND SHEEP—a breed not widely known but possessing a very great merit, both as regards Closeness and Quality of Wool, combined with an Excellent Carcase, a very Hardy Breed that thrives on hard keep.

PRIZES WON AT BREED SHOW, 1918-19.

RAMS AND BULLS FOR SALE.

Apply: C. H. HOBBS, Oldport, Oswestry, Salop.



Ryeland Ram Lamb, 10 months.
Bred by C. H. Hobbs, 1919.



Ryeland Ram Lamb, 10 months.
Bred by C. H. Hobbs, 1919.

THE BUCKLAND SOUTHDOWN.

Registered No. 550.

OWNED by Lady Fitzgerald. Descended from such world-wide strains as those known as the Webb, the Throckmorton, the Adeane, the Pagham Harbour, and the Penfold. None are purer or better in respect to flesh or fleece. Full pedigrees available, both of males and females.

The choicest sires only in service, headed by ADISHAM NO. 15 of 1916, 11487 vol. 26, the Champion Ram at Chichester Show and Sale 1917, where he was purchased for 100 guineas.

RAMS, EWES, AND LAMBS FOR SALE.

Apply:—**H. WILSON, Buckland, Faringdon, Berks., England.**

RAILWAY STATION—Challow, Gt. W. Rly.

TELEGRAMS—Buckland.

PASTORAL AGENCY COY., HUGHENDEN

**STOCK and STATION AGENTS
(NORTH QUEENSLAND)**

WE ARE IN CLOSE TOUCH WITH ALL NORTHERN OWNERS,
AND BUYERS REQUIRING SHEEP OR CATTLE PROPERTIES
IN NORTH QUEENSLAND SHOULD COMMUNICATE WITH US
PROMPTLY.

EXPORTER of PEDIGREE STOCK to all Parts of the World

EDWARD SMITH,

107 Bransford Road ————— Worcester, England,

OAN SUPPLY

All Classes of HORSES, CATTLE, SHEEP and PIGS for BREEDING
and EXHIBITION PURPOSES.

N.B.—Shorthorn and Hereford Cattle, Ryeland and Border Leicester Sheep a speciality

SHIPPING and INSURANCE arranged to every part
of Australia and New Zealand at lowest rates.

SECRETARY to the RYELAND FLOCK BOOK SOCIETY, which is
England's best breed for crossing purposes for the getting
of fat lambs.

Correspondence Invited and References Given.

Cables—"SHORTHORN," WORCESTER, ENGLAND.

AGENT—Robert F. Duncan, Stock and Station Agent, Rockhampton, Queensland.

Pyne, Gould, Guinness LIMITED.

Authorised Capital £1,000,000.

Subscribed Capital £500,000.

HEAD OFFICE:

CASHEL STREET, CHRISTCHURCH, N.Z.

BRANCHES AND RESIDENT AGENTS AT
Timaru, Ashburton, Rakaia, Methven, Geraldine, Temuka, Pleasant
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Leeston, Oxford, Rangiora, Springston, Amberley,
Culverden, Cheviot, Kaikoura, Nelson
and Blenheim.

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Land, Insurance and Shipping Agents.**

Blood Stock Salesmen and BUYING or SELLING
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Stock and Share Brokers, Representative for Trustees,
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Grain, Seed, Produce and General Merchants.

**THE COMPANY MAKES ADVANCES AGAINST WOOL, STOCK, GRAIN,
PRODUCE, Etc., and acts generally as FARMERS' BANKERS.**

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Bankers—
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ALLAN STEWART LTD.

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Wool Brokers, Stud Stock Salesmen & Land Agents

We Specialise in all Stud Stock.

CATTLE.—Ayrshires, Jerseys, Shorthorns, Devons, Angus.

SHEEP.—Lincolns, Leicesters, Southdowns, Romney Marsh,
Corriedales, Border Leicesters.

STOCK FOR PRIVATE SALE. PROPERTIES, FARMS to PASTORAL ESTATES.

Catalogues on Application.

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**Stock, Station, Land and Financial Agents,
Fat Stock Salesmen.**

Stock Sale Days:—

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Our Principals personally attend to all Stock consigned to them.

We are Property Salesmen, and invite particulars of same, and
correspondence from all Agents and Principals.

Head Office: 16 O'CONNELL STREET, SYDNEY.

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STUD STOCK SPECIALISTS.

All Auction Sales, in which
we hold many Records, are
conducted by Principals.

BADGERY BROTHERS LTD. SYDNEY, N.S.W.

Dont Forget !!!

*To send us your draft for the next
Royal Sydney Sales.*

In touch with All Leading Breeders, and can supply Any Breed of Sheep or Cattle.

Write BADGERY BROTHERS LTD.

SYDNEY.

ROMNEY MARSH SHEEP.

The Registered Romney Marsh Flock at the Home of the Breed.

NO. 18

Owned by **ARTHUR FINN, Westbroke, Lydd, Romney Marsh, England**

This flock, established for more than 140 years, maintains the highest reputation. Honours gained in 1912: 1st for wool at the R.A.S.E. Show. In the Ewe Flock Competition of the Romney Marsh Sheepbreeders' Association, 1375 Westbroke Ewes obtained the 1st Prize in the large Flock Class, and Reserve for the Champion Cup for the Best Flock.

Inspection invited of 2000 registered sheep grazing on the Marsh under natural conditions.

Telegrams and Cables: ARTHUR FINN, LYDD.

A.B.C. Code 5th Edition used.

Telephone No. 2, Lydd. Lydd is 70 miles from London, S.E. Railway.



Champion Romney Ram at Panama Exhibition, 1915, bred by Mr. Alfred Matthews in New Zealand, sired by a Westbroke Ram out of a Westbroke Ewe, both parents imported from the flock of Mr. Arthur Finn, Westbroke, Lydd.

LUDDENHAM COURT ROMNEYS

Founded 1899.

Winners of

Flock No. 122.

CHAMPIONSHIP FOR EWE FLOCK, 1919.

A Flock of Choice Breeding and merit as proved by above Championship won by ENTIRE FLOCK, judged on the farm in NATURAL BREEDING CONDITION.

INDIVIDUAL PEDIGREES. SOUND CONSTITUTION. TYPICAL FLEECE.

Apply

ASHLEY STEVENS,

Station Telegrams:—FAVERSHAM.

LUDDENHAM COURT, FAVERSHAM KENT.

Quested's Romney Marsh Stud Flock and Herd of Pedigree Red Poll Cattle.

**QUESTED'S No. 11 of 1917.**

Champion Ashford Show, 1918. Sold by Public Auction for 1,000 guineas. Resold at Buenos Aires for record price of £1,600.

Over 500 PRIZES

Won for Sheep including:

**CHAMPIONSHIP CUP for BEST FLOCK of
ROMNEY MARSH EWES** in England.

Championship Cup won at Ashford Show and Sale **Five Years in succession. TEN Challenge Cups** won outright at this Show.

1438 Stud Ewes to Ram in 1918.

Individual Pedigree of every sheep since 1894.

For particulars apply to Owner:

J. EGERTON QUESTED

"The Firs," Cheriton, Kent,

ENGLAND.

Cable Address: **ANIMALS SHORNCLIFFE CAMP**
Railway Station, SHORNCLIFFE, S. E. & C. Railway

The Surenden-Dering Flock

ROMNEY MARSH SHEEP.

Established 1858.

A typical Flock of ROMNEY MARSH Sheep, individually numbered throughout, is one of the attractions of this well-known sporting domain, owned by

Sir Henry E. Dering, Bart.

(Late 3rd Australian Div.)

The Flock's uniformity of type, character, fleece, and well-covered heads needs inspection to be assessed at its real value. Selections of the choicest bred specimens procurable are always on offer, and Colonial and Foreign breeders are invited to inspect. Every facility is offered for so doing on application to the Agent, Pluckley, Ashford, Kent.

Rail Station, Ashford or Pluckley, S.E. Railway. Telegrams, Pluckley. Telephone, 3A Charing.

Kent or Romney Marsh Sheep.

The Adisham Court Flock

FOUNDED 1916.

REGISTERED 1917.

Property of Mr. O. C. MILLEN, Adisham Court,

Canterbury, Kent, England.

Descended from the choicest strains of prize winning Blood, reared naturally, none excel it for hardiness, typical character, weight of bone and evenness of fleece. Its 1918 and 1919 records are unexcelled. At Ashford, the principal Breed Exhibition and Sale of the year, in 1918 it won 2nd Yearling Ram R. Champion and 4th best pen of five, and in 1919 2nd best group of five. Its sale averages were—1918, £159/15/-, top price 300 guineas; 1919, £63/2/4, top price 130 guineas. The 1918 Yearling and R. Champion was resold in Buenos Aires for £550.

Apply Owner, as above.

Cables and Telegrams: Wingham.

The Nash Court Romneys

Registered Flock No. 192.

A typical Flock representative of the choicest strains of blood, mainly those associated with the well known names of Macknade, Quested, Syndale Farmer and Otham Flocks.

Selections have been exported to Argentine, Uruguay, Chili, Falkland Islands, Japan and India.

Reared naturally and unpampered, the Sheep are hardy and sound in constitution.

Apply the Owner—

MR. R. G. TAYLER,

Nash Court, Margate, Kent, England.

RYELAND SHEEP

One of the oldest breeds of the British Isles, and the least crossed.

Leading Characteristics

Character and Symmetry. Hardy constituted. Mutton and Wool of the finest quality. Early maturity. Freedom from foot rot. Average weight of fleece washed 7½ lbs. Average dead weight of yearling at 12 months, 70 lbs. Special attention paid to export trade.

Write direct to the Secretary:—

W. H. WOODCOCK,

St. Cuthbert's,

Whitecross Road,

Hereford, ENGLAND.

Kent or Romney Marsh Sheep

The hardest and best grazing mutton and wool sheep of Great Britain. Successfully acclimated wherever they are required.

Annual Ram Show and Sale

Held at Ashford, Kent, in September.

Descriptive pamphlet, list of Breeders and all information from—

W. A. Ball, 12, Hanover Square, London, W.1.

The Hoaden Court Flock and Herd

ROMNEY MARSH SHEEP

RED POLLED CATTLE

FIRST PRIZE FLOCK, CLASS III, 1920

Mr. H. T. GREENSTED, Hoaden Court, Ash, Canterbury, Kent, England

Breeds and owns a Romney Marsh Flock, with full individual pedigrees kept naturally without pampering, resulting in the production of sound vigorous, thrifty sheep, having that most desirable of all qualities—even staple and uniform fleeces. Its notable successes in 1919 were 2nd prize for Small Flocks in the 1919 Flock Competition, and 4th for Yearling Ram at Ashford, 1919.

A Herd of Red Poll Cattle, a breed unrivalled for the dual purpose of Milk and Beef Production, is also kept at Hoaden, and specimens of the best lines of breeding are to be found there.

Rail Stations:—Adisham, Grove Ferry, or Sandwich, S.E. and Chatham Railway. Telegrams, Hoaden, Ash, Canterbury.

The Hoo Romney Marsh Flock

CHAMPION FLOCK 1920 FLOCK COMPETITION.

Founded 1853.

Registered Vol. 1.

Maintained entirely on commercial lines, no flock affords a better selection of thoroughly reliable breeding stock. Yearly drafting for over half a century has produced a fixed and most desirable type, the more prominent characteristics being great width and spread of carcass, even and uniform fleeces, and a general flock likeness, with most typical and well-covered heads. The best sires procurable have invariably been used, and the result is that, once a purchaser of Stud Sheep, always a purchaser. Apply the owner, Walter Miskin, White Hall, Hoo, Rochester, Kent, England. Railway Station, Sharnal-street. Telegrams, Hoo, Rochester. Telephone, 10 Hoo.

The Singleton Romney Marsh

Flock No. 132.

Outright winner of the Champion Prize for best Woolled Ram, Ashford, 1918 and 1919.

This Flock, owned by Mr. R. Stanley Strouts, Singleton, Great Chart, Ashford, Kent, England, ranks amongst the best of its breed. Its history is fully recorded since 1882, none of better breed is procurable, and individual pedigrees are available.

This Flock will be Sold by Auction, unless previously dispense in its entirety, on the last Wednesday of September 1921. Catalogues and full details of pedigree from:—W. W. Chapman, 4 Mowbray House, Norfolk Street, Strand, London, W.C.2, who will be pleased to execute commissions, arrange for shipment and insurance.

Cable and Telegrams—Sheepcote, Estrand, London.

Telegrams—Great Chart, Kent

BRISBANE STUD STOCK SALES

Dalgety & Company Limited

will conduct their Annual Sale of

STUD CATTLE AND STUD AND FLOCK SHEEP

in August, 1921.

(Brisbane Exhibition Week). Exact dates to be named later.

CONSIGNMENTS INVITED.

Dalgety & Company Limited, Brisbane,

STOCK AND STATION AGENTS, WOOL AND PRODUCE BROKERS.

SOUTH AUSTRALIAN MERINO STUD RAMS

We are in touch with all the leading Stud and Flock Masters in South Australia and can supply particulars of any class of sheep required.

We invite enquiries and will be pleased to inspect, report, or select stock for clients.

BENNETT & FISHER LIMITED,

LIVESTOCK SALESMEN.

WOOL AND PRODUCE BROKERS, etc.

CURRIE STREET, ADELAIDE.



Four Wanganella Rams from one Breeder that realised

£2950 an average of **£737 10 s.**

at **RODERICK'S ANNUAL RAM SALE**

Next Annual Sheep Event August 16, 17, 18, 1921

1920 Annual Stud Sales, Sheep and Cattle realised £250,000. Merino Ewes realised up to £260 each

JOHN RODERICK & CO. LTD.

Purebred Stock Salesmen - Bloemfontein - South Africa

P O. Box 248.

Cables: Roderick, Bloemfontein.

Shipments can be made through THE AUSTRALIAN ESTATES & MORTGAGE CO. LTD., William-st., Melbourne.

DALGETY & COMPANY LIMITED

SYDNEY.

STUD STOCK SALESMEN.

Pedigreed Cattle of all Breeds
Merino, Corriedale & British Sheep

Being in constant touch with all the leading Breeders of the Commonwealth and New Zealand we are in an exceptionally favourable position to secure Stud Stock for intending purchasers.

SOUTH AUSTRALIAN MERINO RAMS

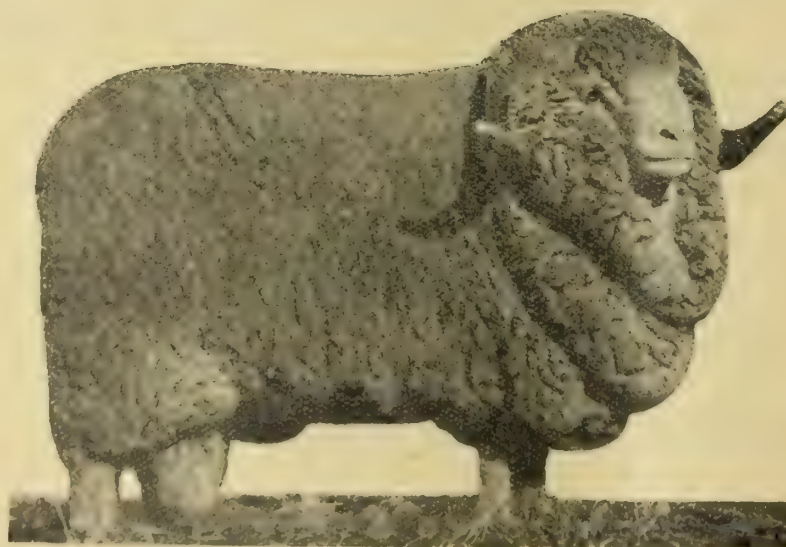
Being in touch with all the principal breeders
—we are in a favourable position to render
every assistance to intending purchasers.

Elder, Smith & Co. Limited

Stock and Station Agents, Wool Brokers, &c.,

ADELAIDE.

Stud Flocks of South Australia



TYPICAL SOUTH AUSTRALIAN RAM.

renowned for constitution,
size and heavy cutting
fleece of high-class warp
wool.

Sheepbreeders requiring
Rams or Ewes from
any of the South Australian
Stud flocks are invited to
communicate with the
undersigned, who can place
expert service at their dis-
posal and afford special
facilities for shipment
through their Branches at
all seaports.

DALGETY & COMPANY LIMITED, ADELAIDE.

Moreheads Limited

Woolbrokers, Stock and Station Agents,
BRISBANE, QUEENSLAND.

We can offer a wide selection of Pastoral Properties in all parts of Queensland.

NOTE.—We Specialise in Stud Stock.

SOUTH DEVON SHEEP

equal to any British Breed in Size of Carcase, Weight of Wool, and Length of Staple.

valued for crossing purposes to secure increased depth of flesh, weight of carcase, other with heavier fleeces and increased length of staple. Hardy and full of constitutional vigor, with remarkable aptitude for development. Two hundred registered rams to select from.

ram Sales held annually at Totnes and at Brent, Devon, and Liskeard, Cornwall, August; and at Truro in September.

list of Flockowners and full particulars on—

W. CHAPMAN, The Secretary,
Wray House, Norfolk St., Strand,
London, W.C., England.

Choice MURRUMBIDGEE RIVER PROPERTY 8000 ACRES.

00 acres rich river flats—property netted—10 paddocks—well watered—nine miles siding—good station home and outbuildings—box, she, belah and kurrajong—£6—good terms.

particulars of this place or other first-class properties may be had from:—

ITT & EASTWAY
Station Salesmen, etc.,
O'Connell St., Sydney.

HAVING had nearly Two years' experience on Sheep Farm in South-East, I am anxious to gain further experience in another district.

ALLAN DUNCAN,
Box 374, G.P.O., Adelaide.

AWYER'S SON requires position on Station as Bookkeeper, 4 years Auctioneering experience, leading firm Auctioneer, 20 years of age, Protestant, good knowledge Double-Entry Bookkeeping and Typing; quite willing to do outside work. Apply "ULYSSES," P.O. Box 230, G.P.O., Melbourne.

FOR SALE BY AUCTION The well-known Darling Downs Estate, JIMBOUR HOMESTEAD.

By order of the Mortgagees, Messrs. MOREHEADS LIMITED will offer by Public Auction

On TUESDAY, 26th APRIL, 1921, at 3 p.m. sharp,
At the WOOL EXCHANGE, Parbury House, BRISBANE,
the well-known Homestead Block of that Estate, comprising, viz:—

AREA—5939 acres freehold. **SITUATED**—16 miles from Dalby—the Dalby-Jandowae Railway line skirts the boundary, the Jimbour Railway Station and Trucking Yards being situated within a mile of homestead—65 miles from Toowoomba, and 165 miles from Brisbane. **COUNTRY**—About three-quarters of the area is rich agricultural land, mostly black soil and ready for the plough. About 1400 acres have been cultivated; the balance is well-grassed, lightly-timbered ridges. The carrying capacity under natural grasses and herbage exceeds a sheep to the acre in average seasons. As wool-growing country is absolutely first-class. **WATER**—Well and permanently watered by Jimbour and Cattle Creeks, six sub-artesian bores and wells, all fitted with windmills, pumps, tanks, and troughing. **IMPROVEMENTS**—The homestead is a very large two-storied stone building, and numerous outbuildings, store, stables, &c., horse, cattle and sheep yards, woolshed, and subdivided into a large number of grazing and cultivation paddocks by sheep and cattle-proof fencing. A good seam of coal underlies the homestead at a depth of about 60 feet, and has been worked for the use of the station.

JIMBOUR is admirably adapted for either Stud Cattle or Horse Breeding, for which it has been used for many years, the cattle on the natural grasses growing to great size and weight.

Exceptional Terms will be given to purchaser, viz:—

Deposit 10 per cent. cash, balance in 10 equal annual payments bearing interest at 6 per centum. Interest payable half yearly.

Inspection can be made at any time prior to sale.

For fuller particulars apply to—

MOREHEADS LIMITED, Brisbane, Auctioneers.

FOR AUCTION.

Central Queensland Cattle Property "DISNEY"

184 Square Miles.

2115 Cattle.

64 Horses.

Under instructions from Messrs. Ramsay Bros. Ltd., we will Auction the above First-class Cattle Property, viz:—

At ROCKHAMPTON, TUESDAY, 12th APRIL, 1921,

At Leichhardt Hotel, at 10 a.m. sharp.

"DISNEY" is situated 100 miles North of Clermont, and 12 miles from Twin Hills Telegraph Station in the South Kennedy District, and adjoins the well-known cattle properties: Elgin Downs, Mt. Douglas, Twin Hills, Avon Downs and Diamond Downs.

Area, 184 Square Miles. **Lease** expires 31st March, 1932. One Quarter resumable at any time.

Rent, £181 per annum.

Country.—First-class breeding or fattening country comprising good ridges and forest country; also black soil plains, with Blue, Mitchell, Flinders and other grasses, edible shrubs, Saltbush, etc.

Watered by Mistake Creek (6 miles frontage) with Permanent Holes, and two other creeks; also Sub-artesian Bores with big supplies, each bore equipped with Windmill, Tanks and Troughing.

Improvements.—All securely fenced, mostly new; Yards, Dip being erected. Two-storied House, Kitchen, etc.

Plant.—Necessary Working plant, and Portable Pumping Head.

Stock.—2115 Branded Cattle, Well Bred Herefords, comprising 1262 Females, nothing older than No. 3's; 814 Males, No. 0's to No. 7's; 39 Hereford Bulls. Estimated branding 700 this season. 64 Horses.

4½ Inches Rain has just fallen, and the Property is in First-class Order.

For Sale on a "Walk in, Walk out" Basis. Terms, ½ Cash, Balance in 5 equal Annual Payments, Interest at 6½ per cent. per annum.

Inspection can be made at any time prior to Sale.

For Fuller Details, etc., or mode of Inspection apply promptly to:—

Moreheads Limited, Brisbane.

Australian Estates & Mortgage Co. Ltd., Rockhampton.

Appleton & Co., Clermont.

Auctioneers in conjunction.

The Northern Territory of Australia.

Pastoral Lands open to Application in Terms of the Crown Lands Ordinance, 1912-18.

Applications are invited for Pastoral Leases of Northern Territory lands as under :—

Situation, Area, and Closing Dates for Applications.

- A.** Eighty-six blocks with areas ranging from 100 to 600 square miles, situated East of the Overland Telegraph Line, between Tenant's Creek and Barrow Creek, and extending to Alroy Downs, Alexandria, Avon Downs and Lake Nash leases, and including land on the Sandover and Marshall Rivers. Applications will be received up to and including the 14th day of May, 1921.
- B.** Twenty-six blocks, with areas ranging from 210 to 940 square miles, situated between the McArthur River and the Queensland border, Southerley to the Northern edge of the Barkly Tableland and Northerly to the Coast.

Applications will be received up to and including the 21st day of May, 1921.

- C.** Ten blocks, with areas ranging from 190 to 600 square miles, situated East of Newcastle Waters. Applications will be received up to and including the 21st day of May, 1921.
- D.** Sixteen blocks, with areas ranging from 140 to 740 square miles, situated in the Alice Springs District. Applications will be received up to and including the 21st day of May, 1921.

TERM.—The term of the leases shall be for forty-two years.

RENT.—The annual rent to be paid during the first period of twenty-one years of the term of the lease is as follows :—For the first seven years of the term of the lease, the annual rent varies from one shilling to five shillings per square mile, according to the classification of the block. For the second seven years the annual rent varies from one shilling and sixpence to eight shillings per square mile, and for the third seven years from two shillings and sixpence to twelve shillings per square mile. The rent for the second twenty-one year period of the term of the lease will be fixed by re appraisalment.

IMPROVEMENTS.—The value of improvements per square mile to be effected on each block is as follows :—During the first three years of the term of the lease, the amount prescribed varies from ten shillings to three pounds. By the end of the seventh year of the lease the amount prescribed varies from one to six pounds, and by the end of the fourteenth year of the lease, the amount prescribed varies from two to eight pounds. Thenceforth such improvements are to be kept in good repair for the remainder of the term of the lease. Regarding this condition the Administration has laid down the policy that it does not expect lessees to erect improvements that may be unproductive.

STOCKING.—The stocking conditions require that the land included in any lease must be stocked with from one to two head of great cattle per square mile at the end of the third year of the lease, and before the end of the seventh year, such stocking must be increased to the rates of from two to four head per square mile, and that before the end of the fourteenth year of the lease, the stocking must be further increased to from four to six head per square mile. The lease to be kept stocked at the last-mentioned rate for the remainder of the term of same.

NOTE.—The rate per square mile varies according to the classification and stock carrying capacity of the land.

NOTE.—The improvement and stocking conditions are subject to any extension of time which the Classification Board at Darwin may grant.

In stocking, four head of sheep or small cattle equal one head of great cattle.

The first year's rent and £1 10s. for preparation and registration of lease must accompany each application.

Application forms, full particulars, and plans may be obtained from the Home and Territories Department, Melbourne, or the Lands Office, Darwin.

Applications may be lodged at either of the above offices.



Attention is directed to the following regulation under the Crown Lands Ordinance relating to the determination of applications :—

- (1) Where there are two or more applicants for the same block of land, the Classification Board shall allot the block to the applicant who, in the opinion of the Board, is the most suitable for the development of the Northern Territory.
- (2) Where the Classification Board considers that two or more applicants are equally suitable, it may decide the matter by ballot.
- (3) Nothing in this regulation shall take away the discretion of the Classification Board in relation to the granting or refusal of applications.

West Australian Pastoral Properties for Sale.

WELL-KNOWN ASHBURTON STATIONS.

"Minderoo" & "Hardey Junction"

TOGETHER WITH ALL STOCK AND PLANT.

THURSDAY, 24th MARCH, 1921, at 3 p.m., at the Palace Hotel, PERTH.

ELDER, SMITH & CO. LTD., and DALGETY & CO. LTD., in conjunction, have been favoured with instructions from the owners to submit to public auction on the above date the well-known "Minderoo" and "Hardey Junction" Stations, as going concerns, together with all Plant and Stock:—

"Minderoo" Station.

Situated on the Ashburton River, and adjoining the port and town of Onslow. The homestead, well situated on the run, is only 22 miles from Onslow.

Area.—522,000 acres Pastoral Lease (No. 225/96).

Rental and Tenure.—The annual rental payable to the Crown is 20s. per 1000 acres subject to appraisalment. An application for extension of lease has been made, and when approved the lease will expire on 31st December, 1948, subject to section 30 of the Land Act Amendment Act 1917.

Waters.—The Ashburton River runs through the centre of the property for about 55 miles, and contains many permanent pools. There are 23 wells, 21 of which are equipped with mills, tanks and troughing.

Fencing.—280 miles of fencing (218 miles of 5-wire fencing, and 62 miles of 6 wires) enclose 18 paddocks.

Buildings.—Wood and iron homestead of 6 rooms and lounge, equipped with "Delco" lighting plant, bachelors' quarters of 5 rooms, blacksmith's shop and tool room, garage, cart shed, and men's quarters, out-camps. The usual stock yards, in addition to 4 sets of drafting yards.

Plant.—2 waggons, 2 drays, spring cart, buggy, 2 Ford motor cars, harness (camel and horse), tools, and the general station equipment.

Stock.—About 26,000 sheep.
40 cattle.
120 horses.
15 camels.

Date of Shearing.—July.

Rainfall.—Average about 8 inches.

Remarks.—"Minderoo" is one of the earliest established stations, and is regarded as comprising some of the finest pastoral country in the mid north of W.A. There is an abundance of top feed in the form of many varieties of edible shrubs and soft spinifex, and is abundantly furnished with indigenous grasses and herbage in season. With further improvements it should carry about 45,000 sheep, in addition to a limited number of big stock. Its proximity to a port is no mean asset.

"Hardey Junction" Station.

Situated.—At the junction of the Hardey and Ashburton Rivers, about 140 miles from the town and port of Onslow.

Area.—343,000 acres of Pastoral Lease (Leases Nos. 224/96, 2579/102, 776/102, 775/102, 593/102, 152/96, 561/102, 151/96, 150/96, 149/96).

Rental and Tenure.—The annual rental payable to the Crown is 20s. per 1000 acres, subject to appraisalment. An application for extension of lease has been made, and when approved the lease will expire on 31st December, 1948, subject to section 30 of the Land Act Amendment Act 1917.

Waters.—There are several permanent pools in the Ashburton River, which traverses the station, and in addition there are 11 wells, 10 of which are equipped with windmills, tanks and troughing.

Fencing.—The property is subdivided into 14 paddocks, the fencing consisting of 5 and 6 wires.

Buildings include homestead, men's quarters, shearing shed, and shearers' quarters (erected in 1919), out-camp sheds, &c., 4 sets of drafting yards.

Plant.—3 waggons, dray, sulky, motor cycle, camel and horse harness, and usual sundries required for the efficient working of a station. Stores will be sold with the station.

Stock.—About 11,000 sheep, 75 cattle, 200 horses, 19 camels.

Remarks.—"Hardey Junction" has been long established and successfully conducted as a pastoral proposition. It is well supplied with top feed and grasses. For the last 25 years the excellent horses bred on the station have been in demand throughout the State, the country being peculiarly adapted for breeding horses of excellent bone. The mating of sheep and the selection of rams have been carefully tended, and the flocks have attained a high standard.

For further particulars apply—

ELDER, SMITH & CO. LTD., Perth,
DALGETY & CO. LTD., Perth.

Subdivision Sale

FAMOUS COLLY CREEK ESTATE

Quirindi District, N.S.W.

24,000 Acres Freehold in four blocks

Unsurpassed Grazing Country, Wheat Land, Lucerne and Dairying Land. Average rainfall about 28 Inches.

Auction Sale at Quirindi
On Friday, 22nd April, 1921,

At 2.30 p.m., at Oddfellows Hall.

Block 1.

About 2000 acres east of railway at Braefield platform, four miles Quirindi, securely fenced into two paddocks. About half first class red loam, equal to any in the district for wheat growing, the remainder splendid clean hilly sheep country. Nearly all timber killed. Watered by two dams—water obtainable at 50-60 ft.

Block 2.

About 3000 acres west of railway, six miles Quirindi, securely fenced into four paddocks, two cottages and out-buildings. Practically river flats, suitable for corn, lucerne, wheat, &c., some ridges, watered by good well, with windmill, 10,000 gallon tank and troughs, also small dam, and frontage to Borambil Creek, with half-mile of running water, a bore with windmill and two tanks and troughing.

Block 3.

About 14,000 acres of magnificent land. This is the homestead block, and is one mile from Willow Tree Railway Station, and six miles Quirindi. It is splendidly improved, and is securely fenced and subdivided into twenty paddocks. The railway runs right through this property, between Willow Tree and Quirindi. Large up-to-date wool shed and all necessary improvements for efficient working of a stud and grazing property. Suitable for lucerne and wheat growing, black soil, hilly grazing country, much of it very fattening, and some ironbark ridges. Watered by eight Bores with Windmills, Tanks, and Troughing. Springs, and Dams, giving a magnificent supply in all seasons.

Block 4.

About 5000 acres known as Chilcott's Creek, excellent grazing, heavy and safe carrying country, detached about three miles from "Colly Creek." Nearly all ringbarked, watered by Chilcott's Creek, numerous creeks and gullies, and a bore 100 ft. deep with water rising to within 6 ft. of surface, fitted with mill and troughing. Cottage of five rooms, &c., well fenced.

This property, which adjoins the well-known "Warrah" Estate, is recognised as one of the safest and best on the edge of the far-famed Liverpool Plains, and is only being offered for sale in order to wind up the partnership of Miss V. K. R. Weatherly and Mrs. G. D. Mackenzie, the present owners.

Terms:

5 per cent. on Signing Contract.
20 per cent. on possession on 29th June, 1921.

15 per cent. on 1st July, 1922.

20 per cent. on 1st July, 1923.

20 per cent. on 1st July, 1924.

20 per cent. on 1st July, 1925.

Interest at the rate of £6 per centum per annum will be charged on the balance of purchase money owing from 1st July, 1921, payable half-yearly on 1st January and 1st July in each year. The first interest payment to be paid on 1st January, 1922.

Intending purchasers will be shown over the property on application to the Auctioneers, who can with confidence recommend any persons in search of investments of this character to attend the sale.

SALE DAY—Friday, 22nd April, 1921, at 2.30 p.m.

Dalgety & Company Limited, Sydney

William Cadell, Quirindi

Auctioneers in conjunction.

Stud Stock.

The Official Organ of the "Australian Longwool
Sheepbreeders' Association,"

and

The Official Organ of the "Stud Beef Cattle
Breeders' Association of Australia."

Latest Stock Returns.

AUSTRALIA AND NEW ZEALAND.

	SHEEP.		CATTLE.		HORSES.	
	1919.	1920.	1919.	1920.	1919.	1920.
N. S. Wales ...	33,465,534	29,901,701*	2,852,047	2,854,877*	577,183	496,403*
Queensland ...	18,220,985	17,379,332	5,786,744	5,940,433	759,726	731,705
Victoria ...	15,778,902	14,422,745	1,596,544	1,631,120	523,788	513,500
S. Australia ...	6,625,184	6,014,565	342,768	349,562	269,255	264,901
W. Australia ...	7,183,747	6,697,951	943,847	880,644	180,094	174,919
Tasmania ...	1,841,924	1,781,425	218,234	214,442	41,221	39,452
N. Territory ...	47,520	—	420,362	638,431	26,674	26,231
Total Aust.	83,163,796	76,197,719	12,160,546	12,509,509	2,377,941	2,247,111
New Zealand	25,828,554	23,914,506	3,035,478	3,101,945	363,188	346,407
Argentina ...	—	44,850,000	—	27,050,000	—	8,323,815

N. S. Wales returns in each case are to 31st Dec., 1919, & 31st Dec., 1920
South Australia " " " to 30th June, 1919, & 30th June, 1920
Q. & W.A. " " " to 1st Jan., 1919, & 1st Jan., 1920
Victorian & Tas. " " " to 1st Mar., 1919, & 1st Mar., 1920
N. Territory " " " to 1st Jan., 1917, & 1st Jan., 1918
New Zealand—Sheep returns only are to 30th April, 1919, & 30th April, 1920.
Cattle and horses are to 31st Jan., 1919, and 31st Jan., 1920.

* Estimated.

Unreserved Sale of Registered and Tested Pedigree Friesian Cattle.

ON 20th APRIL, 1921.

To be Sold by Public Auction, absolutely without Reserve, at the
Co-operative Saleyards, adjoining the Ongarue Railway
Station on North Island Main Trunk Line, New Zealand:

30 Registered Pedigree Cows and Helpers,
carrying Test records and bred by Sires of proven
ancestry.

12 Heifer Calves—entered for registration in ensuing
Herd Book of N.Z. Friesian Breeders' Association.

6 Bulls—Registered or entered for Registration. Ready
for service and bred from proven Sires and Dams.

Included are 6 Heifers entered for N.Z. £500 Derby. All offering
eminently suitable for Export, and sold subject to passing Govern-
ment Export Health Test. Herd averages over 300 lbs. Butter
Fat. All under 5 years old.

Catalogues on Application.

Owners & Vendors:

S. Knight & Sons,
"Oakleigh,"
Ongarue, N.Z.

Auctioneers:

Dalgety & Company Limited,
Te Kuiti, N.Z.
Farmers' Co-op. Auct. Co. Ltd.
In conjunction.

Forthcoming Shows, 1921.

MARCH.

18-19—Christchurch (N.Z.) Ram
Fair.
21-30—Sydney Royal, N.S.W.
23-24—Queanbeyan, N.S.W.

23-28—Johannesburgh, S. Africa.
29-30—Dalby, Q.
30-31—Nanango, Q.

APRIL.

6-8—Bathurst, N.S.W.
7-8—Coonabarabran, N.S.W.
13-15—Narrabri, N.S.W.
13-15—Orange, N.S.W.
13-16—Grafton, N.S.W.
16-21—Moree, N.S.W.

19-20—Hereford Herd Book Society,
at Hereford, G.B.
19-21—Toowoomba, Q.
26-28—Goondiwindi, Q.
27-28—Dubbo, N.S.W.

MAY.

2-3—Coonamble, N.S.W.
3-4—Charleville, Q.
4—Molong, N.S.W.
10-11—Mitchell, Q.
10-11—Royal, Dublin, Ireland.
17-18—Blackall, Q.
17-18—Roma, Q.

18-19—Ipswich, Q.
18-19—Nyngan, N.S.W.
24-26—Pietersburg S. Africa.
31-June 1-3—Dunedin Winter, N.Z.
31-June 2—Pretoria, S. Africa.
31-June 4—Bath & West at Bristol,
G.B.

JUNE.

8-10—Hereford and Worcester, at
Hereford, G.B.
9-11—Richmond Horse, G.B.
20-25—Olympia Horse, London, G.B.

21-24—Palmerston North National
Dairy, N.Z.
23-25—Rockhampton, Q.
28-July 2—English Royal at Derby,
G.B.

JULY.

26-29—Highland at Stirling, Scotland, G.B.

AUGUST.

3-4—Suffolk Sheep at Ipswich, G.B.
8-13—Brisbane National.
9-12—Royal Dublin Horse, Ireland.

17-18—Hamilton, Vic.
30-31—Corowa, N.S.W.

SEPTEMBER.

19-24—Melbourne Royal.
28-29—Yarrowonga, Vic.

New Zealand Shows.

Otago A. and P. Summer Show.

Glorious weather was experienced on both days of the
Otago A. and P. Show held on the 9th and 10th of Febru-
ary, at Tahuna Park, Dunedin, and the result was general
satisfaction. This was the second occasion of holding the
show in February instead of as in former years in Novem-
ber. Although competition in some of the stock sections
was meagre, the quality was throughout full of merit. The
entries this year, although not as good as the previous year,
compare favourably with the years 1917 and 1919. Sheep
show a decrease in numbers, also Clydesdale horses, but
cattle bulked larger.

In the section for Clydesdale breeding horses Messrs.
Thomson and Co.'s Wai-rongoa stud Clydesdales scored
heavily. They won championship honours for entires with
Scotland's Victor, the winner for the class for colt foaled
since August 1918, also taking the reserve championship
with Brilliant Again, a fine animal a year older than Scot-
land's Victor. In the class for colts, the Wai-rongoa stud
scored with Lord Buchlyvie in a good class. Championship
honours were secured by Mr. D. G. Wright, of Windermere,
with his dry mare, Mona Ronald, Messrs. Thomson and Co.'s
Lady Scotland taking the reserve championship, and win-
ning also Ainge's Challenge Cup for the best Clydesdale
colt or filly bred by the exhibitor.

In the cattle section some excellent Shorthorns were
shown, the yearling bull, Knapdale Diamond Conqueror
(sire Diamond Prince, dam Plover Gem), owned by Angus

A. J. HUNTER,
F.I.A.C., ETC.

JAMES HUNTER & CO.
Public Accountants, Auditors, etc.

PASTORAL MATTERS
A SPECIALTY.

DALBY, Q.

Campbell, Wyndham, being of exceptional merit, and securing the championship. The successful exhibitors were Wm. Waddell (Waikaka Valley), James Birtles (Waikouaiti), and H. Tisdale (Middlemarch). Polled Angus cattle, although poorly represented numerically, well merited the champion-



CHAMPION BORDER LEICESTER RAM (DUNEDIN).
Exhibited by Mr. Thos. Little, Windsor.

ships awarded, and there is little doubt that more will be heard in the show ring of the Mount Royal stud in the future.

Herefords were worthily represented by Mr. L. C. Hazlett's Salisbury herd, North Taieri, who won all classes with animals typical of the breed. Mr. Arch. Gillies (Hampden) won the Ayrshire bull championship with Sir William of Inglewood, also taking the championship for cows.

Although the sheep numbers were far from what they should be, the quality was in no way behind previous exhibitions. In the Border Leicester class, Mr. Thos. Little, of Windsor, practically carried all in front of him with sheep of his own breeding. In English Leicesters, Mr. H. J. Andrew, of Maheno, held winning pens throughout the section. In Lincoln, the New Zealand and Australian Land



CHAMPION DRAUGHT MARE, MONA RONALD (DUNEDIN SHOW).
Exhibited by Mr. D. G. Wright, Windermere.

Company (Moeraki) once again demonstrated their ability to defy all comers, and swept the board of prizes with animals of their own breeding.

In Romney Marsh, the southern breeders, Messrs. Murray Bros. (Clydevale), scored heavily, taking the championship for rams, and reserve for ewes, with Mr. W. G. Lad-

brook, of Gore, winning the champion ewe, and reserve champion for rams. Mr. Andrew won both Romney ram and ewe lamb classes.

In the Corriedale section, the New Zealand and Australian Land Company proved apparently too formidable, and practically won in all classes with capital sheep of their own breeding.

The fat sheep section was interesting, but here, too, the competition was limited, and Mr. W. Gardiner, of Peebles, again this year demonstrated the fattening qualities of his acres by winning practically all classes with a notable entry. The fat cattle entered were good sorts, and for the most part evenly fleshed, but there was not much competition from outside, and there is evidently plenty of room to improve this section considerably.

Masterton.

The Masterton A. and P. Association experienced ideal weather conditions for their 34th annual display, which was held on their picturesque grounds at Solway on 15th and 16th February.

Masterton has long been noted for its displays of beef cattle, and although there has been a decrease in numerical strength during the past few years, the quality, however, still keeps its high standard. The same also applies to the sheep divisions.

There were 31 entries in Herefords, and the judge, Mr. A. Miller (Hastings), was of opinion that the quality displayed could not be surpassed in any show ring. Mr. Donald McKenzie's (Woodlands, Wairarapa) Gay Helmsman, by Mancel Helmsman—Amethyst, won the bull championship, and Mr. G. F. Moore's noted heifer Park Amethyst 36th the cow award. These two breeders had a ding-dong fight right throughout the various classes.

Shorthorns numbered in all 16 entries. Sir Walter Buchanan annexed both championships. The bull award went to Greenhill Royal Duke, bred by Mr. Arch. McLean, of Hawkes Bay. In the female section Sir Walter was again successful, with Beaulieu Duchess 167, bred by exhibitor, the reserve also going to another of his stock. Mr. W. Howard Booth was also a successful exhibitor.

The Polled Angus mustered 14 entries, and the judge stated that they were a good lot. Messrs. Burling Bros. were the owners of the champion bull Ermitano (imp.), the same owners also securing the female award. Mr. Hugh Gillies (Palmerston North) was somewhat disappointed with the fat cattle exhibits—he expected much better quality. The champion and runner-up were, however, fine specimens. Mr. G. F. Moore (Kai Iwi) owned the champion.

The Romneys were not up to former years in number, but the quality has seldom been equalled. Messrs. W. Perry and Son were again well to the fore in their exhibit of rams, the champion being a splendid sheep. Mr. W. Howard Booth (Carterton) secured the ewe championship.

The Lincoln exhibit was an exceptionally good one, and Mr. Bland Rayner (Masterton) practically swept the board.

Mr. T. O. Haycock has an interesting exhibit of Corriedales, and he is likely to create a keen interest in this breed in various districts. The Southdowns were not up to previous displays, but the champions could not be denied, and were owned by Mr. James Knight (Feilding).

The Donald Estate was again successful in the draught stallion championships, and carried off most of the honours.

Photos of some of the principal prize-winners will appear in our next issue.

Dannevirke.

The twelfth annual farmers' festival held at Dannevirke on 9th and 10th February was a great success. This association is going ahead by leaps and bounds, and it is pleasing to ascertain that enterprise is reaping its just reward.

The newly erected cattle pavilions are quite unique in the method of arrangement, and offer excellent facilities in connection with the judging of the various breeds. Mr. Frank Armstrong, the noted Aberdeen-Angus breeder, who has been touring America and England in company with Mrs.

Armstrong and family, timed his return to a nicety, and was heartily welcomed by his many friends.

The Aberdeen-Angus display was really good, there being in all 23 entries, the exhibitors being Messrs. Frank Armstrong, Donald Grant, T. M. Webb, Edward Cresswell, and Thos. W. Ellingham. The chief honours fell to Mr. Donald Grant's exhibits, this breeder securing both championships. The bull which secured the championship was his Victor of Rarichie, bred by J. Grant, a noted winner at other shows. The champion cow was Parkhead Ruth, bred by A. Cochrane. Mr. T. M. Webb's Royal Duke of Gwavas secured first award in the aged class, and the prize for yearling went to Mr. Frank Armstrong's Physique, a nice, showy animal.

Mr. J. S. Nelson was the only exhibitor in Herefords, his noted heifer, which holds an unbeaten record, again looking well.

There were 63 entries in pure-bred Romneys. The ram championship went to Mr. J. E. Hewitt's (Mangamaire) Challenger, 2 shear, and the ewe award to Mr. G. E. Allen (Masterton). The latter also secured the trophy for most points.

The Lincoln classes produced in all 40 entries, Mr. W. H. Gaisford (Oringi) taking the ram and ewe awards. Another prominent winner was Mr. H. B. Stuckey in the Southdown classes.

Photos of some of the leading prizewinners will appear next month.

Feilding.

The Feilding Association held a most successful exhibition on 1st and 2nd February, the entries showing an increase of over 200 as compared with those of the previous year. In the beef cattle section the Shorthorns predominated, and the judge, Mr. W. McKenzie, of Masterton, was greatly pleased with the display—the class of yearling bulls in particular. The championships for both bull and cow went to representatives of that noted Wairarapa herd, owned by Sir W. C. Buchanan. The premier honours in the Hereford section also went to the one exhibitor, Mr. A. E. Sandilands, of Kiwitea, and in like manner Mr. J. F. Knight secured both championships for Polled Angus.



CHAMPION DRAUGHT STALLION, PRINCE REGRET.
Exhibited by Donald's Estate, Featherston.

There were numerous entries in the various sheep classes, Romneys holding pride of place, several fine ram lambs catching the judge's eye.

The Romney ram championship was secured by Mr. W. F. Jacob, the ewe award going to Mr. J. Knight. The latter swept the board in Southdowns, securing both championships and various other awards.

The Lincoln ram championship went to a Wairarapa breeder, Mr. W. Howard Booth, the ewe award being secured by Mr. T. K. Taylor.

The Shropshire ram championship went to Mr. G. L. Marshall's exhibit, and the female championship to a ewe exhibited by Sir James Wilson.



CHAMPION SHORTHORN BULL, GREENHILL ROYAL DUKE 21st.
Exhibited by Sir W. C. Buchanan.

In the draught horse division the championship for stallion went to Donald's Estate Prince Regret. Some photos of prize-winning stock appear among illustrations this month.

Auckland.

It has often been stated that the Auckland show will never be a success as a stock exhibition until its location is shifted to some more suitable centre, the exhibition at present being held at what might be termed a "dead end," that is, viewed from a breeder's standpoint. There was, however, a goodly array of dairy cattle, and keen competition throughout. The only beef breed catalogued was the Shorthorn, there being in all 14 entries, Messrs. Woodward Bros. (Mt. Albert) being the principal exhibitors, and securing most of the awards, likewise the championship for both bull and cow.

The various sheep classes were poorly represented. With the exception of the Romney Marsh, no championships were awarded. Mr. A. D. Bell (Clevedon) exhibited some fine quality Romneys, and secured the premier award for rams. The ewe championship went to an exhibit of Mr. Wilfred Johnstone (Pāpatoetoe), another prominent breeder, whose stock made a creditable display. Some photos of prize-winning stock appear among illustrations this month.

New Zealand Ram Fairs.

Hawkes Bay.

The entries of Romney flock rams were smaller than last year, but the average quality was better. Bidding was brisk from the start, and prices on the whole were satisfactory, only a few lines being passed in. The figures reached for the finer wools were good, the highest price being 17 guineas for shearlings. The best class of stud Romneys sold well, prices ranging from 15 guineas to 60 guineas. For Lincolns there was a poor demand, and the highest price was only 4 guineas for flock rams. Border Leicester flock rams were generally poor, but a few lots sold at 6 guineas to 8½ guineas. Southdowns sold well, flock rams making up to 15 guineas, and studs brought satisfactory prices. Shropshires were passed in, and two pens of Cheviots made 7 guineas.

Masterton.

A substantial decline on the values of last year was noted. The highest price for Romney rams was secured by Perry and Sons, of Penrose. The best for Lincoln rams was 73 guineas, which was paid for an animal bred by Messrs. Perry. A large number of entries were passed in, as they did not reach the vendors' reserves. A number of purchases went to Waikato, Tolaga Bay, Canterbury, and Otago.

Feilding.

At the Feilding ram fair 1500 sheep were offered, where there was a very good demand for the best rams. Stud Romneys sold up to 50 guineas for a ram bred by Mr. W. H. Gibson, and flock

omneys made up to 16½ guineas. Southdowns were in good demand, and sold up to 32½ guineas for studs, and to 15 guineas for flocks. Eleven guineas was the top price offered for a stud Lincoln, and as this was on behalf of Mr. Perry, Masterton, it will show how poor the demand was. Shropshire rams sold up to 6 guineas, which was a better price than previously obtained at this fair.

Warwick Show, Queensland.

At the recent Warwick Show in Queensland a first-rate lot of animals were brought forward. In the Shorthorns, Mr. J. Burgess, Canning Downs South, won the bull championship with Fairy Prince III., a three-year-old, the reserve going to Mr. O. C. Slade's Aladdin. Mr. C. E. McDougall, Wyndhurst, won the championship for females with Lady Baldwin, and Mr. J. Burgess the reserve with Clipper Duchess.

Mr. J. H. S. Barnes' Broadward Eclipse won the Hereford bull championship, and the cow championship was won by Jessie, belonging to the Junabee stud.

In Aberdeen-Angus, Mr. G. C. Clark, of East Talgai, won the bull championship with Mahoe of Akitio imp. from New Zealand, and the honours for cow with one of his own breeding, Scottish Queen.

British Live Stock Interests.

Our usual London letter is unfortunately not to hand owing to delayed overseas mail and floods on the trans-Australian railway. The mails are still most erratic, there having been a gap of nearly three weeks since the arrival of the last from London, while no less than four are due to arrive in the next three weeks.

Stud Stock Notes.

SHEEP.

Messrs. E. J., G. W., and W. T. Merriman and C. C. Hall, all cull breeders, were the most successful exhibitors of Merinos at the Yass (N.S.W.) Show, held recently.

Seventeen 2-tooth Shropshire ewes have been shipped from northern Tasmania to the order of the Japanese Government. They were from the stud of Mr. Alfred Newton, of Exton.

Mr. D. Macfarlane, of Eureka Estate, Rylstone, N.S.W., informs that he has sold to the Japanese Government 17 Corriedale stud sheep at prices ranging from 12 to 100 guineas each.

Mr. George Mills, Glenmona Park, Victoria, recently imported 10 valuable Border Leicester ewes, bred by Mr. Jas. Jeffrey, Little Spot, Dunbar, Scotland, through Dalgety and Co. Limited.

At the Uralla (N.S.W.) Show last month the principal prizewinners in the Merino sections were the Exors. C. C. Dangar, of Postwyck; Mr. J. Fletcher, of Kentucky; and Mr. F. G. Taylor, of Terrible Vale.

Mr. Norman Nicolson, Streanshalh, Tas., reports having sold the following Corriedale sheep:—2 stud and 7 flock rams to Mr. H. Oldmeadow, Lowes Park, Tas.; 20 flock rams to Mr. Carmichael Lyne, Riccarton, Tas.

Mr. W. D. Hunt's second annual sale of stud Romneys was held at Invercargill, N.Z., on 23rd February, when 15 stud rams sold at 5 guineas to 96 guineas, averaging close on 20 guineas, and 50 flock rams averaged 4½ guineas, every lot being sold.

Mr. George F. Doyle, Cardington Hall, Molong, N.S.W., by means of a striking advertisement now appearing in The Review, illustrates some of his leading sires from 1903 to 1920. These pictures are interesting in that they show how Mr. Doyle has adhered to the one type throughout.

Bennett and Fisher Limited, the South Australian firm of live stock salesmen, announce by means of an advertisement appear-

ing on another page, that they are in close touch with all the leading stud breeders in their State, and can supply particulars of any class of sheep required. The firm will be pleased to inspect and select stock for clients.

Mr. G. A. Goodchild, of Great Yeldham, Essex, Eng., has recently shipped 23 good quality Suffolk rams to the order of a buyer in Peru. The rams were bred by Messrs. G. A. Goodchild, W. F. Paul, Webb and Sons (Combs) Limited, Fred Slater, Sir Ernest Cassel, Mr. W. C. Jackson, Mr. S. A. Taylor, and Messrs. Hasler and Co., and are the first of two large consignments of last season's rams to be shipped to that country.

Mr. M. S. Hawker, North Bungaree, S.A., reports the following sales of 1920 rams for forward delivery:—Specially selected at 10 guineas—40 to South Australian, 10 to New South Wales, and 75 to Queensland buyers. Selected at 6 guineas—300 to various Queensland clients, 107 to six New South Wales buyers, and 25 to one South Australian. Flocks at 4 guineas—500 to Queensland, 100 to Western Australia, and 125 to New South Wales.

Mr. F. D. McMaster, Dalkeith, Cassilis, N.S.W., reports having made the following sales:—5 selected Merino rams to Mr. A. E. Blanch, Wallen, at 10 guineas; 2 to Mr. G. A. Clark, Muswellbrook, at 10 guineas; 25 to Mr. J. Fagan, Cowra, at 10 guineas; 40 flock rams to Perpetual Trustee Company, Tongy, at 4 guineas; 30 flock rams to Mr. Glasson, Gulgong, at 5 guineas; 6 flock rams to Mr. Robinson, Enlan, at 4 guineas; 70 flock rams to the New South Wales Government at 4 guineas; and 250 flock rams to Mr. F. I. Bennett, Corfield, Winton, Q., at 5 guineas.

At the Murgha (N.S.W.) stud sheep sale last month, Charles Mills Limited, of Uardry, purchased a number of the best of the special stud ewes, also some of the top of the special hogget ewes and double studs. They included 130 special labelled ewes, 30 special hogget ewes, 56 double studs, 1 two-year-old stud ram, and 14 of the best of the yearling rams. The purpose is to form a stud of pure Murgha-Wanganellas. These sheep will be kept quite apart from the well-known Uardry stud, and will be known as the Pemblegong stud, and will be run at Pemblegong, a property of 12,000 acres on the Murrumbidgee River, near Hay. It is to be kept absolutely pure and to itself.

At the annual Goulburn (N.S.W.) ram sale, held by Mr. W. H. Wheatley at the end of last month, the demand was good, but prices were, as expected, lower. Over 1000 were sold to 81 different buyers. The principal sales included:—Account A. R. Maple-Brown, Gundary Plains, to 3¼ guineas; account F. S. Falkiner and Sons, Boonoke, selected rams from 10 guineas to 15 guineas, average £12 3s., flock rams from 4¼ to 6 guineas, average £5; account F. S. Falkiner and Sons, Wanganella Estate, flock rams, average £4 14s. 6d.; account W. Reynolds, jun., Gilmour, flock rams, average £3 6s.; account G. E. Stuart, Goolgumballa, flock rams, 4 to 4¼ guineas, average £4 9s. 3d.; account A. J. McInnes, Roslyn, flock rams, average £2 7s. 3d.; account W. W. Killen, Merribee, flock rams, £4 4s.; account Roy McCaughey, Coonong, flock rams, 3 to 4 guineas, average £3 8s. 8d.; account Thomas Millear, Deniliquin Stud Park North, flock rams, 3½ to 5 guineas, average £4.

CATTLE.

Mr. H. W. Curtis, Abbey Green, Llangothlin, N.S.W., has sold 3 Devon bulls, 15 months old, to Mr. Robert L. Sands, Cooma.

Major Philip Charley, Belmont Park, Richmond, N.S.W., advertises his notable Red Polled herd in this issue. Some fine stud and herd bulls and heifers are for sale.

Mr. E. W. Evans, of South Africa, has purchased some Hereford cattle from Mr. E. Short, Feilding, N.Z., and also 3 stud Herefords from Mr. G. F. Moore, Bushy Park.

Mr. John McMaster, Binnia Downs, N.S.W., was very successful with his Shorthorns at the Coolah Show last month, winning the male championship and several other prizes.

At the Bombala (N.S.W.) Show both the Shorthorn bull and cow championships were won by the Bibbenluka Estate. Mr. J. C. Maslin, Gunningrah, was also a successful exhibitor.

The Shorthorn bull Rothes King 4th, second prize yearling at the Chicago International, has been bought by Sir F. Baillie, of Oakville, Ont., Canada, for £3000 from Mr. Wm. Hartnett.

At the Perth sales, Scotland, last month an Aberdeen-Angus bull calf sold for 3000 guineas, and two others for 2700 guineas each. Three thousand guineas is the record price for a calf.

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MORRIS, LITTLE & SON (For. & Col.) LTD.
Melbourne and Sydney.

The Pastoral Finance Association, Sydney.
H. Donkin & Son, Queen Street, Brisbane.
Goldsbrough, Mort & Co. Ltd., Rockhampton.
Barns, Philp & Co. Ltd., Townsville.
Geo. Ferguson & Co., Port Adelaide.
Henry Wills & Co., Fremantle and Albany.
De Garis Sons & Co. Ltd., Narracoorte, S.A.
AND ALL STOREKEEPERS.

At Mr. W. D. Hunt's second annual sale of stud Friesian stock, held at Invercargill, N.Z., last month, there was a keen demand. Twelve cows and heifers averaged 77½ guineas, with a top price of 230 guineas for a three-year-old heifer; 32 bull calves averaged 44 guineas, with a top price of 110 guineas; and 3 heifer calves averaged 66½ guineas, the top-priced lot, 92 guineas, going to an Australian buyer.

Mr. C. E. McDougall reports the following Shorthorn sales from his Lyndhurst, Dulacca West, and Murweh (Queensland) studs:— 3 herd bulls at 40 guineas to Mr. A. D. Henry, Craggs, Yeulba; 1 stud bull at 100 guineas to Mr. F. McMaster, Hughenden; 10 herd bulls at 30 guineas to Messrs. C. and S. Officer, New South Wales; 5 selected herd bulls at 40 guineas to Mr. A. A. Elliot, Cunnamulla; 2 stud bull calves at 55 guineas to the Portuguese Government, Timor; 4 stud bulls, paddock-fed, at 100 guineas to Mr. H. Greenup; also 10 herd bulls to different buyers at from 20 to 30 guineas.

An important sale of registered and tested pedigree Friesian cattle is advertised to be held at Ongarue, N.Z., on 20th April, on account of Messrs. S. Knight and Sons, Oakleigh. The offering includes 30 registered cows and heifers carrying test records, and bred by sires of proven ancestry; 12 heifer calves entered for registration in the next herd book; and 6 bulls registered or entered for registration. All the stock are suitable for export, and sold subject to passing Government export health test. The auctioneers are Dalgety and Co. Limited, Te Kuiti, and Farmers' Co-operative Auction Company Limited.

Mr. H. B. Baylis, Pranjip Park, Murchison East, Vic., has sold 3 Shorthorn bulls to Mr. R. S. Falkiner, Groongal, Hay, N.S.W., viz., Summerton's Prince 2nd, roan, calved 24th August, 1919, sire Clifton Cherry Duke 2nd, dam Summerton's Princess; Pranjip Duke of Derrimut, white, calved 3rd October, 1919, sire Tuppal Duke of Derrimut 31st, dam Tuppal Duchess of Derrimut 4th; Pranjip Duke, dark roan, calved 2nd November, 1919, sire Clifton Cherry Duke 2nd, dam Kilborum Duchess 4th. He has also sold to Mr. C. B. Kellow, Gundaline, Hay, the Shorthorn bull Kilborum Duke 20th, red roan, calved 22nd November, 1918, sire Bolinda Duke of Derrimut 40th, dam Kilborum Duchess 4th.

GENERAL.

For stud stock breeders "The Pastoral Review" just fills the bill, and does under one cover what the various State papers do combined. It reaches all the buyers of stud stock in the Commonwealth, besides those in South America, South Africa, New Zealand and Pacific Islands. It is therefore the ideal paper for the stud stock breeders, and is the means of saving them much money in their advertising campaign.

Alfred Mansell and Co., live stock exporters, Shrewsbury, Eng., recently shipped a selection of Berkshire boars and gilts to Alexandria, Egypt. It comprised a boar and a gilt selected from Mr. Arthur Hiscock's herd, namely, Manor Sunbo, by Robert 2nd, and Manor Charm, by Iwerne Lad 2nd. Mr. G. P. Sanday also supplied a boar and a gilt, viz., Puddington Blackguard and Puddington Beauty, both sired by Bold Conqueror.

As some of our clients seem under a misapprehension, we would again point out that The Review accepts no payment for inserting photos of champion stock at the big shows. Whether a man advertises or not, if he gains a championship his picture goes in the ordinary course if the editor considers it worthy of a place. Our editorial columns are not in any way purchasable, nor are any Review representatives allowed to accept a douceur. We have never heard of one doing it, and he would get the order of the sack if we did.

Feeding Suffolk Lambs.

Commander J. A. Duncan, of Arbroath, Scotland, has had a wonderful result from the feeding of pure-bred Suffolk lambs, says the "Scottish Farmer." Ten shearling ewes were purchased for Commander Duncan by the Suffolk Sheep Society's expert buyer at Ipswich in August 1919, and mated to a shearling ram. On 22nd December, 1920, Commander Duncan consigned ten of his lambs for sale on the dead weight basis. On arrival the ten lambs scaled 150½ lbs. each live weight. When killed they dressed a net carcase weight of 85½ lbs. each, showing a carcase percentage of fully 57 per cent. Sold on the Glasgow Dead Meat Market, they realised £9 0s. 9d. each. The lambs were all twins, and off gimmers, and lambed between 26th February and 12th March, 1920. They were getting cabbage and yellow turnips by day and run off on to loam at night. Cake and corn up to a maximum of 1 lb. each per day.

Lands.

Repudiation Act.

Land Appeals in Queensland.

As a result of the recent sittings of the Land Court in Queensland, reassessing the rents of pastoral holdings under the Repudiation Act, over a score of appeals have already been lodged. At the forthcoming sittings of the Full Court three typical cases will be argued.

In the case of Katandra the contention is that the judgment of the Land Court was a judgment by consent, and is not appealable. In the case of Dagworth the decision of the Land Court was that the rent already determined was not less than a sufficient rent, and that there is no appeal from that decision. Sesbania appeal provides a general question as to the jurisdiction of the court. It will be determined whether the court can raise the rent higher than the Crown was prepared to accept. It is possible that the cases will go to the High Court.

At the Blackall Land Court, where Mr. P. W. Shannon presided, the hearing of the redetermination of the rent for the second period on Terrick Terrick gave rise to the point by Mr. C. F. Neilson, M.L.C., on behalf of the Law Debenture Corporation Limited, that the report and valuation supplied by the Crown were not in compliance with the Act, inasmuch as they were prepared for 1915, and not for this case. In the meantime many big improvements had been made. Mr. Neilson also objected to the jurisdiction of the court on the ground that under the Amending Act of 1920 it only had the power to review the rents already fixed by the court. In this instance the previous rental was accepted by the lessee, and not determined by the court. The decision was reserved. The objections taken are similar to those taken in previous cases, which were over-ruled by the Land Court. By taking the objections in each case the right to appeal is preserved. The court has already ruled that it has power to review the rents already fixed.

In another case, at the same court, Mr. Peter Tait, of Clark and Tait, owners of Northampton and Ravensbourne, stated that taxation on a big station now amounted to 13s. in the £. The cost of production was now £250 to £400 per 1000 sheep as compared with £150 to £250 in 1914. It was only £70 when he first went to the district.

Severe increases were imposed on some of the big companies in the cases heard by Mr. Shannon. The rents are for the second period ending on 30th June, 1924. The decisions were:—

	Present Rent.	Crown's Claim.	Court's Decision.
	s. d.	s. d.	s. d.
Ruthven	49 6	95 0	80 0
Mount Enniskillen ..	37 6	88 0	72 6
Erne	18 9	26 8	26 8
Northampton Downs ..	63 9	98 9	95 0
Ravensbourne	70 0	93 0	90 0
Maryvale	18 9	35 0	35 0
Anthony South	15 0	52 6	35 0
Alice Downs	75 0	90 0	90 0
Anthony North	18 0	45 0	35 0
Lancevale	18 0	45 0	35 0
Evora	43 6	79 0	75 0
Evora Exchange	30 0	85 0	75 0
Malvern Hills	66 0	134 0	105 0
Terrick Terrick	72 9	114 5	111 0
Lorne	72 9	134 0	107 0
Bayamunda	18 9	25 0	18 9

The last named is a small holding contiguous to the town, and is unimproved on account of the ravages of the prickly pear.

In regard to Alice Downs, Mr. Shannon said that the lessee had accepted the assessing Commissioner's valuation of 90s., and the representative of the Crown admitted that in view of the ravages of the pear, to which the land was subject, a higher rent could not be fairly asked. It was stated, on behalf of the Crown, however, that a proposal was now under consideration which, if effected, would withdraw from that holding the whole area infested with pear. In that event the Crown would ask 111s.

In the matter of grazing selections the court also raised the rents, the highest decision being 4½d. per acre. Most of the

decisions coincided with the Commissioner's estimate, but in a few cases a fight was put up, Mr. Shannon considered that the present rental was sufficient in the case of selection 336, J. H. Hart, as a recognition of the pluck and enterprise shown by the selector. The sinking of a bore cost £17,181, and the depth was 7009 ft., which, he understood, was the deepest in the Commonwealth. He also noted the determination of the selector to proceed further with the work.

Land Sales.

NEW SOUTH WALES.

Messrs. Pitt and Eastway, Sydney, advertise a **Murrumbidgee river property** for sale, consisting of 8000 acres.

Carbeens, Coolatai, via Warialda, comprising 3000 acres, has been purchased by Mr. H. V. Walker from Mr. F. Houston.

Fairfield Estate, Millie, comprising 5167½ acres freehold, C.P. and C.L. land, the property of the late Peter Small, has been sold by auction at 30s. per acre.

VICTORIA.

Trawalla Homestead Block, comprising 8000 acres, with all buildings, balance of the estate being taken for soldier settlements, has been bought by Commander H. Mackenzie, R.N., from trustees of the estate of the late Admiral Bridges.

Fernside Estate, Seymour, the property of Messrs. Chisholm Bros., has been bought by Messrs. Duncan Chisholm and Sons at 5 10s. per acre. The area of the property is 8687 acres freehold. The selling agents were N.Z.L. and M.A. Company Limited, Messrs. Macarthur and Macleod, and Heywood, Rose and Co.

QUEENSLAND.

Atua, located in the Dalby district, and comprising 2450 acres perpetual lease, has been sold by Mr. H. E. Remfrey to Mr. Clark.

Zillie, situated in the Warra district, Darling Downs, comprising 333 acres freehold, has been sold by Mr. S. H. Townend to Mr. P. J. Cooper.

Sussex Park, Hughenden, comprising 5996 acres grazing farm and 331 acres grazing homestead, has been sold by Mr. J. H. Harrop to Mr. W. Elliott.

Euraba, situated in the Nonda district, and comprising 40,000 acres grazing farm and grazing homestead, has lately been sold by Mr. A. H. Underwood to Messrs. Wharton and Co.

A company entitled the **Mount Larcom Pastoral Company Limited** has been registered. The capital is £200,000 in £1 shares. The subscribers include Mr. A. H. Stirrat, of Mount Larcom, Gladstone, Q.

Jimbour Homestead Block, comprising an area of 593 acres freehold, and located 16 miles from Dalby, is advertised for sale at the Wool Exchange, Brisbane, on 26th April. The property is well improved and admirably adapted for either stud cattle or horse breeding. All particulars are obtainable from Moreheads Limited, Brisbane, the auctioneers.

NORTHERN TERRITORY.

A page advertisement in this issue gives particulars of **Pastoral Lands** which have been thrown open for lease in the Northern Territory, and to which reference was made last month. There are altogether 138 blocks, ranging in area from 100 to 940 square miles, the term in all cases being for 42 years. The notice is illustrated with a sketch map, which gives intending applicants an idea as to the location of the different sections.

TASMANIA.

Two properties in the Lake Country, known as **Bluff** and **Skittle Falls**, comprising 10,863 acres freehold and 6300 acres leasehold, have been sold by Messrs. Allan Stewart Limited on behalf of Mr. I. McCarthy, of Bothwell, to Messrs. Fysh and Edgell, of Dennison, Bothwell.

NEW ZEALAND.

At an auction sale of leases for 14 years of seven pastoral runs at **Hakataramea**, belonging to Canterbury Agricultural College, the rents realised ranged from 1s. 2½d. to 1s. 6d. per acre, and two lots at an upset of 4s. per acre were passed in. The runs under a new subdivision ranged from 7500 acres to 8632 acres, and the few Zealand and Australian Land Company, former lessees, secured two blocks.

Record.

Pastoralists' Association of Victoria.

A meeting of the council of this association was held on 18th February, and a number of important items of business were dealt with. It was noted that the 32nd Convention of the Graziers' Federal Council of Australia is to be held on 6th April at Brisbane, when consideration will be given to new claims, which are expected to be lodged by the A.W.U. in the Arbitration Court regarding shearing and station hands, as well as other important matters, and Messrs. H. M. Turner (vice-president) and Lionel J. Weatherly were appointed as representatives of this association at the convention. Certain amendments of the scheme for registration of contractors will be submitted for federal council consideration.

Various matters arising out of the wool situation were discussed, and in view of the retirement of Mr. C. R. Murphy (who had been appointed to the directorate of the British-Australian Wool Realisation Association), Mr. J. C. Ritchie (president) was appointed representative to the Australian Woolgrowers' Council, with Mr. H. M. Turner as emergency representative.

The position as regards representations which this association had joined with the Victorian Farmers' Union in making to the Railway Commissioners, with a view of preventing the loss of stock in rail transit, was reported. The Railway Commissioners had stated that they could not see their way to improve the existing system.

Pastoralists' Union of Southern Riverina.

At a largely attended meeting of the council of the Pastoralists' Union of Southern Riverina, held on 25th February, Mr. A. S. Austin (president) was appointed to represent the union at the forthcoming Graziers' Federal Council Convention, to be opened in Brisbane on 6th April. This will be a most important convention, seeing that it will have to deal with the claims of the A.W.U. for a new shearing and station hands' award, which are expected to be lodged in the Commonwealth Arbitration Court shortly.

Various matters of importance to Southern Riverina interests, such as the wool situation, taxation, &c., were discussed, and satisfaction was expressed with the report of the delegates who had attended the recent conference in Sydney of the three New South Wales bodies, the Graziers' Association of New South Wales, the Pastoralists' Association of West Darling, and the Pastoralists' Union of Southern Riverina. It was felt that this conference had done much in achieving mutual understanding between the various bodies as to past and future shearing policy, and points of difference in internal organisation.

A letter was received from the Woolclassers' Association of New South Wales refuting, as far as that body was concerned, the published statements that the A.W.U. was now "affiliated with the Woolclassers of Australia." The attitude of the N.S.W. Woolclassers' Association, in maintaining its independence of the A.W.U., was noted with approval, and arrangements were made to join with the Graziers' Association of New South Wales in representation at a meeting the N.S.W. woolclassers intended to hold in Sydney to make their position clear.

A.W.U. and Arbitration.

In his presidential report before the annual conference of the A.W.U., Mr. Arthur Blakeley, M.H.R., indicates that the policy of the union is to stand by arbitration, but in referring to an amendment of the Commonwealth Arbitration Act, which was recently made by Parliament, he says:—

"The A.W.U. cannot tolerate interference by pastoralists in the domestic policy of the union: we are prepared to abide by arbitration: the employers and their Government must take full responsibility if we are prevented, by their action, from continuing our registration in the Commonwealth Court."

The new section of the Act to which Mr. Blakeley refers reads as follows:—

"The rules of an organisation registered under this Act and the officials of such organisation shall not, during the currency of an award in the industry concerned, prevent or impede any members of such organisation from entering into written agree-

ments in accordance with such award at any time prior to the commencement of service."

For nearly thirty years it had been customary for graziers to enter into signed agreements for engagement of shearing employees some weeks and even months before commencement of service. In the 1917 arbitration proceedings the A.W.U. asked that engagements should be made at the time of roll call, i.e., at the commencement of shearing, but this claim was refused by Mr. Justice Higgins. Within a few months of the award coming into operation the A.W.U. at its conference adopted a rule which provides that no member of the union shall sign the agreement prior to "roll call," thus endeavouring to force by union rule what the judge of the Arbitration Court had refused to grant. As the award shearing agreement stipulates in its thirty-eight clauses all the conditions of the shearing, including limitations of the prices which employers may charge where they supply their employees with stores and meat, it is obvious that the only purpose of the rule can be to enable the men upon arrival at the stations to demand rates and conditions other than, and in excess of, those provided by the award. When all shearing arrangements have been made, and the sheep must be promptly shorn in order to prevent loss, the employer is necessarily at a disadvantage in withstanding any demands which may be made under cover of this rule, and considerable use has been made of the clause by members of the A.W.U. during the past three seasons—particularly for the purpose of securing cheap meat. The award prohibits the employer from charging more than wholesale prices for meat, but although the employee receives the full advantage of award rates based upon the cost of living as applicable in other industries (with a liberal allowance for fares, expenses and lost time of travelling) the union has continued in its endeavour to secure meat for its members at as low a price as 3d. per lb.

At the beginning of last shearing season a conference was held between representatives of the Graziers' Associations and the A.W.U., when an agreement was entered into by the associations of South Australia, Victoria, Southern Riverina, and West Darling and the A.W.U. for increased rates, cheap meat, and reduced hours of work, but the Graziers' Associations of New South Wales, while conceding increased rates and cheap meat, refused to agree to a reduction of the working hours as awarded by the court. The A.W.U. had previously submitted a claim to the court for a 44-hour week for shearers, which the judge had refused, and notwithstanding that the rules of the union also provided for a 48-hour week the union officials did everything in their power to get members of the union to demand and insist upon a 44-hour week being granted in New South Wales.

From the above facts, and from Mr. Blakeley's statement, it would seem that the union is prepared to abide by arbitration to the extent only to which award terms are acceptable to the union officials. The suggestion that pastoralists are endeavouring to interfere with the domestic policy of the union is absurd, as the only question arising under the amendment of the Act to which Mr. Blakeley takes exception is the signing of agreements before roll call. As indicated above, the union three years ago adopted a rule which prevented its members from following the common practice of the industry, and it now wishes to maintain the rule so that it will in the future again be able to dictate terms in the face of whatever award may be made by the Arbitration Court. The matter is, therefore, in no sense one of union domestic policy, but is, on the other hand, vital to the successful and peaceful carrying on of the pastoral industry.

While the clause in question was under discussion in Parliament Mr. Blakeley went so far as to hold out a threat that if the clause were adopted he, as president of the union, could not recommend the union to retain its registration under the Arbitration Act. The graziers have acted quite within their rights in making representations to the Government and to members of Parliament in respect of amendments of the Act which they considered were necessary for the purpose of upholding the principles of arbitration, and of preventing unions and their members from resorting to direct action while enjoying the benefits of arbitration awards. The clause was passed in the Senate by 9 votes to 7, and in the House of Representatives by 24 votes to 8, and yet Mr. Blakeley continues his veiled threat that if the union is compelled to conform to the law of the land, and is

prevented from using at the same time the weapons of both arbitration and direct action, it will withdraw from the Arbitration Court. Such so-called allegiance to arbitration principles is worthless, but as the Act in its amended form gives substantial grounds for believing that awards of the Arbitration Court will be obeyed or can be enforced, the Graziers' Association will willingly work in harmony with the A.W.U. so long as it is prepared to loyally observe awards of the court.

Mr. Peter Waite.

The Doyen of South Australian Pastoralists.

It is not given to many men, particularly to the man who has kept out of the public limelight and devoted his life to the building up of a State, to hear the truth, and nothing but the truth, spoken of him during his lifetime. Usually it is the obituary notice alone which does poor justice to a man of this type. Mr. Peter Waite, of South Australia, is an exception to this rule, and he deserves to be.

Some time ago—advancing age, with the physical toll which age demands, caused Mr. Waite to retire from the chairmanship of Elder, Smith and Co. His fellow members of the board of directors were reluctantly compelled to agree, but they persuaded their colleague not to go off the board altogether, so that whilst he remains a member of the board of directors the grand old man of the South Australian pastoral industry is no longer chairman of the company with which he has been so long associated.

At the half-yearly meeting of Elder, Smith and Co., held on 22nd February, the acting-chairman of directors (Mr. J. Fred Downer) took advantage of the occasion to pay the following public and graceful and well-deserved tribute to Mr. Waite. After reviewing the firm's operations for the period under review, Mr. Downer stated:—

"Gentlemen, that is all I have to say as regards our business, but there is a subject more present to your minds to-day than even the important matters upon which I have touched. You will have seen that Mr. Waite has retired from the chairmanship of the company after having held the position for over thirty-seven years. I need hardly say that it was not the wish of his colleagues that he should retire, but he felt that he could no longer carry the responsibility he had borne so long, so we had reluctantly to acquiesce in his decision. Fortunately for us all this change involves no parting, for Mr. Waite retains his seat on the board, and his fellow-directors hope, as you too hope, that he will attend many more board meetings and assist us with his unrivalled judgment and experience. During his tenure of office Mr. Waite has seen the company expand far beyond what at the inception of his chairmanship would have seemed possible. He can claim to have largely influenced that expansion. It has always seemed to me that the most remarkable quality in his great personality is the power of assimilating and developing new ideas. Mr. Waite's mind has retained the vigour of youth to a degree far beyond any other case within my experience. His courage, enthusiasm, and energy communicate themselves to all with whom he comes in contact. His lot was cast in our dry north, and he carved success from what would seem to some of us unpromising material. Where ability and concentration of purpose such as his are combined in one person, it would have taken far worse material to produce failure. From the success which attended his efforts the whole State has benefited. South Australia has had no more valuable colonist. He possesses, or one might say is possessed, by a quality which makes the success of an enterprise the mainspring of his action, rather than the reward which he himself will reap. The beautiful memorial which he has erected to our brave soldiers illustrates his reverence for courage. In that, as in everything else, he has given of his best. No man can do more, but there are few whose best is of the quality of his."

"And now a word as to his successor. When the chairmanship was offered to Mr. Barr Smith he was very reluctant to accept, for in his modesty he felt the difficulty of following Mr. Waite. It was only on the urgent insistence of his colleagues that he ultimately consented. He has presided at our meetings for over two years, and his great ability has impressed the other directors to such an extent that they would have felt it a real misfortune had they failed to overcome his scruples. It is a happy circumstance merely, and not one of his qualifications for the chairmanship of this company, that Mr. Tom Elder Barr Smith unites in his own person the names of two of the founders of the firm. You, as shareholders, and we as his colleagues, are fortunate in having him to succeed Mr. Waite."

United States of America.

SALT LAKE CITY, UTAH, U.S.A., 1st January, 1921.

In some of the Western States the winter thus far has been almost ideal for the stock grazing industry. It has been what is termed an "open" winter, with no extremes of storm and cold, and with not too much snow, though enough to provide ample moisture. In spite of this, however, the report of the entire west as a whole, based on records and observations of U.S. Weather Bureau agents, indicates that the weather has been unfavourable rather than otherwise. Over wide areas there have been spells of alternate freezing and thawing, and in many of the northern counties feeding has been necessary. From Utah westward conditions are good, and in California especially green feed for cattle and sheep is plentiful. Over the Great Plains east of the Rockies the report is not so encouraging, and shrinkage in sheep and cattle is reported from Wyoming. However, there has been no great disaster of any kind, and if the rest of the winter is no worse, the stock men will have little cause to complain, so far as weather conditions are concerned.

The industry, though, is still in a bad way. It is suffering not only from the general upheaval of business as a result of post-war hard times, but from unfortunate conditions in this particular industry itself. The severe drought of the summer of 1919 will be remembered. Following that came a long and almost disastrous winter; as a matter of fact, almost two winters rolled into one, and at a time when the stock men were compelled to pay more than double the normal rates for feed. Some of the expenses of this period were increased from 200 to 600 per cent., and brought many of the growers almost to desperation. However, had misfortunes ceased when the winter had passed the live stock men could have recovered, but just at this time came the big slump in the wool market, and in lamb and cattle prices. As a result of this, many of the growers were absolutely unable to liquidate their obligations, and their banks had to take up the burden and carry them. The general financial situation was so bad, however, by this time that the banks were unable to do what was necessary to relieve the situation, much as they would like to have done so. Strenuous efforts were made to meet the emergency. Government officials and agencies were appealed to; the Federal reserve banks brought their resources into play, but as they had to care in a similar manner for many other branches of industry and commerce, and at the same time conduct their affairs in such a way as to prevent a complete and general crash, even they were unable to do all that was required; Congress took measures to cope with the situation, and other plans were formulated, as have been outlined in previous letters from this section to the "Pastoral Review."

The most recent move of large proportions was the organisation late in November of the Live Stock Finance Corporation, with headquarters in Chicago, and capital of \$25,000,000. Leading sheep and cattle men, representing large interests, met with prominent bankers and formed this pool organisation, which will purchase live stock paper that is not readily marketable from bank and cattle loan associations. A plan has been worked out that will safeguard the investment and give a small margin of profit, at the same time carrying a large part of the burden of the growers' finances.

Wool Situation.

The wool situation in the United States is outlined at considerable length in another letter in this issue. Perusal of that letter will show that the wool men have reached the verge of bankruptcy; in fact, many of them could not begin to liquidate their holdings at present prices and save themselves. The conditions are practically the same in the meat end of the industry. Beef and mutton continue to move moderately in the markets, but the costs of production have been so great that the stock men are obliged to take big losses, reaching in some cases to 50 per cent. Many of the

growers are trying desperately to hold on, believing that the market will come back to normal, and that all will be well. Strenuous efforts have been made to have an embargo placed on meat importations, especially on lamb from New Zealand, which is held responsible in large measure for creating havoc in the domestic lamb market.

Meat Packers.

The big meat packing interests of the country still are fighting to delay putting into effect the Federal order of several months ago that the stock yard and terminal facilities must be divorced from the packing company organisations. This decision, it will be remembered, came at the conclusion of long investigation, and the filing of a suit against the big packers by the Federal Trade Board. Taking advantage of every opportunity permitted under the laws, the packing interests have sought to delay the divorce—ment ordered. A ruling on the contention of the packers that they are unable at present to carry out the court's orders is expected within a short time.

Farm Crops.

Farm crops of the United States for 1920 showed a shrinkage in value of \$5,000,000,000 over that of the previous year, according to 1st December reports of the Department of Agriculture—this, in spite of the fact that the harvest was one of the heaviest in the nation's history, and several crops, including corn, broke all previous records. The valuation in 1920 is placed at \$9,148,519,000, as against \$14,087,995,000 for 1919.

Miscellaneous.

Soil experts and officials of the department of agriculture have sounded the warning that if overgrazing is permitted to continue uninterrupted on the western sheep and cattle ranges of the United States, the perennial forage plants will be replaced by useless annual plants, while the soil will become barren and subject to rapid erosion and leaching. Briefly, the ranges will become useless for grazing, and the live stock industry will be destroyed. It is important, the soil experts point out, to recognise the danger in its earlier stages and to guard against it. Already the situation in some sections, they say, has assumed grave aspects, and the admonition is made impressive that something will have to be done to prevent the spread of this condition. The deferred and rotation systems, it is declared, will in time bring the range back to its original grazing value, but many, many years, indeed centuries, are required to build up a range that has been seriously depleted by overgrazing.

Again agitation has been started for the erection of wool scouring mills and cloth manufacturing plants in the west, near the great ranges which supply such a large part of the virgin wool of the country. At present almost all of the raw wool is shipped two thousand miles or more, just as it is taken from the sheep's back. This means inevitably an enormous transportation toll, for freight has to be paid this great distance on all the dirt, grease, sand, and other foreign substances which cling to the raw wool. Representatives of an eastern concern have recently been investigating the situation with a view to establishing at least one large mill in the west. Utah and Idaho have led in favour as locations for the proposed plants.

The members of woolgrowers' associations in several States of the west recently combined in an effort to secure blankets and other woollen manufactured products made of pure virgin wool. They sent a considerable amount of raw wool, which was being held for them on consignment, to a manufacturer, and had the blankets and other articles made up according to their own specifications. In this way they secured what are declared to be some of the best all virgin wool blankets that have been turned out in years. The use of shoddy and other forms of adulteration has become so general of late, it is declared, that it is almost impossible to get the "simon pure" article in manufactured woollen goods.

An interesting visitor to the United States recently was Claude D. Maclure, of Claude D. Maclure and Co., stock and station agents, Albury, N.S.W., Australia. Mr. Maclure stopped off in various cities of the west, and made a study of live stock and other interests before going on to New York, from which point he intended going on to England and other parts of Europe, and ultimately around the world to his home.

A return shows that the wheat held on farms in the United States of America on 1st March amounted to 207,591,000 bushels, being 26 per cent. of the 1920 crop.

Taxation Problem.

Grazing Partnership.

A dispute between the Commonwealth Commissioner of Taxation and a partnership firm consisting of Thomas Strickland and others in South Australia relative to the right of the latter to treat certain lands as capital under the War Time Profits Tax Assessment Act was settled recently by the High Court, consisting of the Chief Justice (Sir Adrian Knox), Mr. Justice Rich, and Mr. Justice Starke. Strickland, Claude Werron McArthur, and William Stawell each owned land, and they agreed to enter into partnership as graziers. Each retained the title to his own land. The firm thus created held that it had the right to treat the whole of the land as capital in the business, a view which was disputed by the Commissioner of Taxation. The point was referred to the Full Court for an answer.

The court held that as the land remained with the individual owners, and as the partnership as such had no interest in it, there was no reason to take it into account when arriving at the value of capital.

Canadian Farm Products.

Big Drop in Prices.

A Canadian subscriber, Mr. D. Howell, of Calgary, Alberta, writes us under date of 7th January:—"Prices of grain, live stock and wool have dropped heavily the last two or three months over here, but so far, though clothes and some other necessities have come down in price, the cost of meat and flour (or should I say, bread) remains practically the same as before. The winter so far has, fortunately, been a mild one out here in the west, but they have had some pretty bad weather in the east. Prospects for the future are not too bright for the farmer, as the States are putting a fairly heavy duty on live stock, grain and wool going into that country; but this, after all, may prove a blessing in disguise by placing a brake on Canadian purchases there, which are much too heavy. Exchange rates between us run from 15 per cent. to 20 per cent. at the present time."

Boy Scouts.

His Royal Highness the Prince of Wales, K.G., issues an appeal to the peoples of the Empire in aid of the funds of the Boy Scouts' Association.

He asks for £200,000 (one hour's cost of the Great War) in order to place the association on a sound financial footing, and already he has received substantial assurance that his appeal is not likely to be in vain.

The Boy Scout movement, which is now in its 14th year, is sadly hampered by lack of funds. Its scope for development is unlimited, yet everywhere the movement is held back owing to the inability of the association to launch out in its great endeavour to incline the twig so that the future tree may be fit and able to support the Empire.

His Royal Highness, realising the Association's immense and unprecedented possibility for good if the country and those who are to follow in future generations are but prepared to realise it, now asks for the sum that will put the minds of those responsible for the organisation of this great movement at ease with regard to the future. The scheme appeals to everybody. To the hard-headed man of business as well as to those who, more favourably placed, have no harassing thoughts with regard to the financial future, it is the greatest insurance scheme ever evolved, for, look at it as one may, the future of British industry indubitably rests with the youth of the coming generation, and now is the time of their training. The principles of the Boy Scout movement are the antidote to Bolshevism, and the Prince of Wales, himself a Scout, asks you to help him to hand over to the movement the assistance it requires and so richly deserves. Donations should be sent direct to His Royal Highness, addressed H.R.H. The Prince of Wales, K.G., Chief Scout for Wales, St. James' Palace, London, S.W., all cheques being crossed "Boy Scouts' Fund."

Co-operative Marketing.

A conference was held in Melbourne last month at the rooms of the Australian Producers' Wholesale Co-operative Federation Limited between the directors of that company and representatives of the New Zealand Farmers' Co-operative Association of Canterbury Limited and the Federated Farmers' Co-operative Association of South Africa Limited. The object of the conference was to discuss and agree upon joint action in London with regard to the establishment of the organisation in that city. Last year Messrs. C. E. D. Meares and Basil L. Murray (directors of the Australian Producers' Wholesale Co-operative Federation Limited) visited England, and established the federation in that country. The New Zealand and South African federations joined in the enterprise, and as a result organisation was effected to act jointly for the New Zealand and South African and Australian Farmers' Co-operative interests.

The whole position was freely discussed, and the arrangements made by the Australian delegates tentatively, entirely agreed to. Provision was made for arrangements on an even larger scale. The organisations represented at the conference have a combined subscribed capital of several millions of pounds, and a trading turnover of between £50,000,000 and £60,000,000 per annum.

American Tariff.

One of the last official acts of Mr. Woodrow Wilson, late President of the United States, was to veto the Emergency Tariff Bill. This measure had been before the Senate and House of Representatives for about two months, and aimed at imposing high duties on primary products, which, under the Democratic Party administration, had been admitted free. The tariff on unwashed wool was to have been 7½d. per lb.; washed wool, 1s. 3d. per lb.; scoured wool, 1s. 10½d. per lb.; wheat, 1s. 5½d. a bushel; cattle, 30 per cent. ad valorem; fresh or frozen beef, veal, lamb or pork, 1d. a lb.

In a message conveying his veto Mr. Wilson predicted the doom of the party formulating a tariff which would increase the cost of living. He pointed out that there was no necessity for a high tariff on agricultural and pastoral products, as the United States itself exported them in large quantities. The message added:—"Clearly this is no time to erect a high tariff barrier. It would strike a blow at the successful efforts which our great industries are making to place themselves on an export basis. It would stand in the way of the normal readjustment of the business conditions throughout the world. The United States has a duty to itself as well as to the world, and it can discharge this duty by widening, and not by contracting, its world's markets."

The Republican administration took over the reins of Government as from 4th March. A protective tariff is one of the main planks of its platform, and it may be taken for granted that steps will be taken to introduce a new tariff bill soon after the Senate meets. As it usually takes a considerable time to pass an Act of this nature in the United States, nothing definite is likely to happen for a few months.

Australian Population.

ARRIVALS OVERSEA.

	N.S.W.	Vic.	Qld.	S.A.	N. Terr.	W.A.	Tas.	Total Cwth.
T. tal for 1918	26,217	4,695	1,432	393	205	1,117	2	34,061
Total for 1919	39,334	8,762	1,866	2,745	79	4,449	5	57,240
Total for 1920	65,892	16,862	4,014	3,570	84	6,409	13	96,844
1921.								
January ...	6,182	1,870	287	411	4	1,244	—	9,998

DEPARTURES OVERSEA.

	N.S.W.	Vic.	Qld.	S.A.	N. Terr.	W.A.	Tas.	Total Cwth.
Total for 1918	26,127	4,379	1,866	387	81	1,313	15	34,167
Total for 1919	45,278	7,548	1,701	1,235	244	2,773	20	58,798
Total for 1920	65,773	12,296	3,783	2,302	194	3,946	31	88,225
1921.								
January ...	3,610	637	466	200	6	579	4	5,490

The Producers' Associations' Central Council.

A meeting of the N.S.W. Producers' Associations' Central Council was held last month, when Mr. E. P. Simpson presided, and there were also present:—Messrs. C. Binnie, D. Carson, J. B. Cramsie, O. E. Friend, A. E. Hunt, M.L.C., W. F. Jaques, W. W. Killen, J. Mackay, D. Macfarlane, and A. K. Trethowan, M.L.C.

The secretary's annual report was as follows:—

Mr. Chairman and Gentlemen,—During the third year of the Council's existence a number of very important matters have come under review, and the opportunity which the Council affords, of promptly ascertaining the views of chosen representatives of the various producers' associations, has proved an undoubted advantage. In all fourteen meetings have been held during the past twelve months, the attendance at which has been satisfactory. (Reference was then made to the wool situation, which has already been exhaustively dealt with in these pages.—Ed.)

Meat Export.

Since the last annual report further consideration was given to the termination of the Imperial Meat Export Contracts, and eventually arrangements were made throughout the States by which the contracts were terminated towards the end of last year.

Meat.

The council was represented (so long as was considered necessary) before the Necessary Commodities Control Commission, in its inquiry as to the retail price of meat, and the subsequent proceedings were closely watched, so that the interests of stock-owners might be adequately safeguarded.

The council has also had under notice the action of the meat board in ordering the closing of a number of the suburban slaughter houses. After hearing the views of the Meat Board, representatives were appointed to attend a conference for the purpose of ascertaining the views of other interested parties, and the matter will now receive further consideration.

Income Tax.

The council has throughout actively supported the proposal that the income tax of primary producers should be assessed upon an average of five years, and representations have during the year been made in furtherance of the adoption of this method by both the State and the Commonwealth; evidence in its favour has already been given by a member of the council before the Royal Commission on Taxation, and this most important principle will be further advocated when the Commission returns to Sydney. The question of the extent to which wool dividends will be subject to taxation was considered, and it is satisfactory to report that counsels' view that the profits will not be subject to War Time Profits Tax has been accepted by the Federal Taxation Commissioner as correct.

Basic Wage.

Upon the announcement of the recommendations of the Federal Basic Wage Commission, the council prepared a statement indicating the serious nature of the proposals, particularly with regard to the way in which the primary industries would be affected if the recommendations of the Commission were applied throughout the Commonwealth. This statement was submitted to the Government, and also published in the press.

Large Holdings Subdivision.

The bill brought before the State Parliament for the subdivision of large holdings was very carefully considered by the council, and as a result a petition was prepared and presented in the Legislative Assembly, drawing attention to the inequities of the proposal, and the serious effect which would undoubtedly follow if the bill were enacted in its proposed form. The measure was shelved at the end of last session, but it has been reported that it is to be reintroduced next session.

London Representation.

Representations were made to the Government in favour of the appointment of a capable man in London, to keep in touch with overseas markets, and to submit regular reports to the Producers' Associations in Australia, who, it was urged, should share in the appointment. It was further asked that the position of Agent-General in London should be filled by a person who understands the primary products of the State, and who would keep in touch with the markets of the world, and through the Government, supply the various associations with regular reports, indicating the best opportunities of marketing the States' primary produce.

A further meeting of the council was held on 28th ult., Mr. James Kidd (vice-chairman) presiding.

Consideration was given to a communication received from the chairman of the Frozen Meat Exporters' Association of New South Wales, relative to increased rates of freight on refrigerated cargo

on private account as fixed by the Imperial Government, amounting approximately to 1-16d. per lb. on mutton and tugs, and 1/4d. per lb. on lamb. As graziers at the present time are experiencing reduced prices for all classes of their produce, such as meat, tallow, wool, sheepskins, &c., and financial stringency prevails, it was considered that any increase in the rates of freight for refrigerated cargo must inevitably operate against the primary producer by placing him at a serious disadvantage in meeting overseas competition in the marketing of his produce, and that this must inevitably react to the detriment of the Commonwealth as a whole.

It was decided to represent the position to the Prime Minister, protesting against the increases, and asking him to cable to the Imperial authorities with a view to the withdrawal of the increased rate of freight. It is anticipated that the Graziers' Associations of the other States will support this protest.

Consequent upon the resignation of Mr. John Mackay as a representative upon the Australian Woolgrowers' Council, by reason of his appointment as a director of the British-Australian Wool Realisation Association Limited, it was decided to appoint Mr. O. E. Friend in his stead, with Dr. N. W. Kater as emergency representative.

A statement was circulated comparing the tariff proposals with the rates of the old tariff so far as they affect primary producers, and it was decided to give consideration to the subject at the next meeting.

Attention was also drawn to the claims which have been made by the Meat Workers' Union in respect of drovers and stockmen employed at Flemington, and it was decided to communicate with the fat stock salesmen on the subject.

The Latest Books.

Manual of Tropical and Sub-tropical Fruits, by Wilson Popenoe (Macmillan Co.; 5 dols.). Those who desire to obtain the results of the latest researches and practical experiences in cultivating the most promising fruits of the warm regions of the world, excluding the banana, coconut, pineapple, citrus fruits, olive, and fig, should obtain this well-produced volume. Some 24 plates and many figures and tables add to its usefulness.

Productive Soils, by W. W. Weir. (Lippincott Co., London. Price, 10s. 6d. net.) A very comprehensive work dealing with the fundamentals of successful soil management and profitable crop production, this modern American technical farm manual will be valued by numerous readers. More than 200 illustrations add to the value of the text, together with figures and suggestions at the end of the chapters for demonstrations, home experiments, &c., as well as a comprehensive and well compiled index.

Carrying On after the First Hundred Thousand, by Ian Hay. (London: Blackwood and Sons. Price, 2s. net.) The present book deals with a winter campaign in the neighbourhood of Ypres and "Plug Street," up to the battle of the Somme. Readers will recall with pleasure the author's widely read "First Hundred Thousand," which ended with the battle of Loos, and this second volume follows certain well-remembered friends a stage farther in the Flanders Campaign. A third book is not in contemplation.

A Case in Camera, by Oliver Onions (Bristol: Arrowsmith. Price, 7s. 6d. net.) Those who love a good yarn will do well to obtain this well-written novel. It deals with an aeroplane smash on a Chelsea house in 1919, when the pilot and his observer fall in a badly crumpled parachute on to the studio roof. One of them recovers from the fall, and at once shoots his friend. Why? And how did anyone know of it? The author handles the mystery well, and the story grips as one reads the pages. Towards the end of each chapter one feels sure of the solution, and it is elusively snatched away! Irritating? Yes, but not an easy book to lay aside.

Back to Life, by Philip Gibbs. (London: Wm. Heinemann. Price, 9s. net.) Sir Philip Gibbs was one of our most famous war correspondents, and his popularity will doubtless be understood by readers of this work, for he always registers the notes of heroism and terror that are inaudible to the ordinary observer of human woe. The book commences with the day when he first entered Lille, and goes right through till the Army of Occupation entered Cologne, and beyond, back in England. It is a strong, very moving story, a vivid picture of the decay of the soul of the men and women of whom he writes. Perhaps he has overdrawn his picture, but you must get the book and decide for yourself.

The Luck of the Mounted, by Ralph S. Kendall. (London: John Lane. Price, 7s. 6d. net.) A convincing story written obviously with inside knowledge by Sergt. Kendall, late of the Royal North-west Mounted Police. The great Irishman, Sergt. Slavin, and his two gentlemen rankers, have an adventurous time in unravelling the two murders in the mystery.

Publishers' Department.

THE AUSTRALIAN AGRICULTURAL COMPANY LIMITED have declared an interim dividend of 2s. 6d. per share.

THE N.Z. AND RIVER PLATE LAND MORTGAGE COMPANY has paid a dividend of 7 per cent. for last year; £10,000 is added to the reserve, and £22,224 carried forward.

MESSRS. JOHN HOARE AND CO. have amalgamated with MESSRS. JACOMB, SON AND CO., and will be known in future as Jacomb, Hoare and Co., wool brokers, &c., 19 London Wall, E.C.2.

THE NATIONAL MORTGAGE AND AGENCY COMPANY of N.Z. LIMITED have declared a final dividend of 1s. 6d., with a bonus of 3s. per share for the past year; £5000 is placed in reserve, and £42,941 carried forward.

An amalgamation has been arranged between MESSRS. SANDERSON, MURRAY AND CO. and MESSRS. A. L. ELDER AND CO. LIMITED, under the style of Sanderson, Murray and Elder Limited, 2 Gresham Buildings, Basinghall-street, London, E.C.2.

"KOROWA," CHURCH OF ENGLAND GIRLS' GRAMMAR SCHOOL, Ranfurly-crescent, East Malvern, Victoria, is advertised in *The Review*. This is one of the grammar schools connected with Church of England Melbourne Diocese. It has fine accommodation for boarders, and good playing grounds.

The directors of the COMMERCIAL BANKING COMPANY OF SYDNEY LIMITED have decided, subject to shareholders' approval, to increase the capital by £500,000, making the total paid-up capital £3,000,000. Shareholders will be entitled to take one new share for every five shares held. The present shares are of the face value of £25 each, and are paid up to £12 10s. each.

At the half-yearly meeting of ELDER, SMITH AND CO. LIMITED, held in Adelaide last month, a dividend at the rate of 10 per cent. per annum was declared. The chairman stated that the business of the company continued to be on a satisfactory basis, despite the existence of many unsatisfactory conditions, the final net results for the half-year just concluded, when compared with those for the corresponding term in 1919, indicating that results on the whole had been fully maintained.

The "British" System of Refrigeration for Domestic Purposes.

Refrigeration in the home is a problem which requires the serious consideration of every householder, since the sanitary preservation of food is one of greatest importance, demanding the same thought as the proper methods of heating and lighting. Every development, every appliance, and every principle which makes for home comfort and convenience is a step forward, and marks an advance in the right direction.

Ammonia has been scientifically proved to be the most convenient gas for producing low temperatures. The gas has the property of being absorbed by water, forming what is known as commercial or aqua ammonia. When this liquor is heated, the ammonia expands as a gas, leaving the water behind. The gas then passes through a condenser, wherein it becomes a volatile liquid, viz., anhydrous ammonia, which is held in a container until required for use. This liquid ammonia, which is controlled by an extremely sensitive regulating valve, passes into and through a coil of pipes placed inside a cabinet. Immediately on entering it produces frost, cooling the cabinet to any desired temperature below atmospheric. The used ammonia is afterwards conducted back to the generator, where it is reabsorbed into the water from which it was originally distilled.

This, briefly, is the principle of the British Refrigerating Company's system of refrigeration by ammonia absorption.

One of the most important features of the British Refrigerating Company's system is the entire elimination of motive power. The use of engine, motor, compressor plant, shafting, belting, pumps, and expensive foundations are all avoided, hence there are no moving parts of any kind to get out of order, and no skilled attention is necessary. The apparatus is simplicity itself, and the cost for attendance and maintenance practically nil. In operation it is noiseless, and can be placed in any convenient position, such as a cellar, outhouse, or an adjoining building. Two small pipes are all that are necessary to convey the energy to or from one or more chambers, ice tanks, &c., to be operated. The refrigeration commences only at the regulating valve on the cooling coil. When refrigeration is not required this valve is closed, and all waste is entirely eliminated. The valve will control and enable any required temperature to be maintained. The running ex-

penses are practically limited to the cost of a small supply of fuel, gas, steam or oil consumed for distilling purposes.

The "British" system produces crisp, dry air circulation for any temperature desired, such as 35 deg. Fahr. (1.6 deg. C) to 45 deg. Fahr. (7.2 deg. C) for fish, meat, poultry, and general provision storage. In any country where there is damp weather during the cold months, this system can be used to advantage as in the hottest days, to prevent the loss of perishable products due to the excessive moisture in the atmosphere.

The apparatus referred to above is controlled throughout Australia by Wm. Adams and Co. Limited., whose advertisement appears in this month's issue.

Publications Received.

New Zealand Monthly Abstract of Statistics for January 1921, from the Government Statistician.

Agricultural and Pastoral Statistics for New Zealand, from the Dominion Government Statistician.

Quarterly Abstract of Union Statistics for January 1921, from South African Office of Census and Statistics.

Quarterly Summary of Australian Statistics, December 1920, from the Commonwealth Bureau of Census and Statistics.

Thirtieth Annual Report of the Stockowners' Association of South Australia, from the Secretary, Mr. J. A. Riley, Adelaide.

"Martindale," a beautifully illustrated pamphlet, referring to the subdivisional sale of the famous Martindale Estate, New South Wales, from Weaver and Perry Limited, Sydney.

International Review of the Science and Practice of Agriculture for January 1920, and index for 1918, from the Bureau of Agricultural Intelligence, Rome.

Prickly Pear as a Fodder for Stock, by Chas. F. Juritz, Agricultural Research Chemist, Capetown, from the Government Printer, Union of South Africa.

We have received from Messrs. Ginn and Company, publishers, of Boston, U.S.A., a copy of Prof. C. S. Plumb's revised edition of *Types and Breeds of Farm Animals*, an excellent publication of over 500 pages, splendidly produced and illustrated. The revised edition is almost half again as large as the first edition, which has already become a standard text book on animal husbandry and all the recognised breeds of farm animals, especially those produced in America. Prof. Plumb places great emphasis on the importance of breed study and on productive records, such as speed in horses, yields of milk, butter fat, wool, &c. The price of the book is \$3.80 (20s. at present rate of exchange).

Artesian Boring Notes.

NEW SOUTH WALES.

Bores under construction 1st March, 1921:—

Government.—Burren No. 2, 1504 ft. in shale. Water at 1038 ft.

Private.—Dunumbral No. 2, 234 ft. in shale. Mogil, 2608 ft. in shale.

QUEENSLAND.

A report from Marathon Station, Flinders, states that the fourteen artesian bores there are gradually showing a diminution of supplies.

In a bore put down on Accord country (Tara resumption) for Mr. F. A. W. Taylor, the water rose to within 40 ft. of the surface. The plant has been removed to Glenbuck to put down a bore for Mr. Howatson.

The efforts to recover the fishing tools lost in the Roma gas bore, when endeavouring to redeem lost boring tools, have been successful. Part of the 8-in. casing came with the tools. Steps will now be taken to recover the lost boring tools which originally blocked the bore at an interesting stage in its development.

A report issued by the Department of Lands states that since August 1915 250 sites have been tested for water, and water obtained on 233. During the year just ended 410 sites were located by the divining rod, 105 of which were for soldier settlers. Fifty-four sites were operated upon, in fifty of which good serviceable supplies were obtained. At Dotewood State Station, in North Queensland, supplies of 17,000 gallons and 28,000 gallons per day were obtained, though previously seven wells had been sunk without obtaining a sufficient supply.

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THE PASTORAL REVIEW

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Of all matters affecting the Pastoral and Agricultural Interests throughout Australasia.

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Editorial Notes.

The topics to which we would draw especial attention this month are several. Perhaps the most important is the address of Sir John Higgins, setting out the position of the wool trade and the steps it is proposed to take in an endeavour to create an improvement in the general situation. Other articles that should be carefully studied are as follows:—Breeding Immature Females, Cure for Foot-rot, Advice to young Shorthorn Breeders, Merino Stud Breeders' Association, Wimmera Rye Grass, Sheep on the Wheat Farm in Western Australia, and Fall in New Zealand Live Stock Prices. Under Letters to the Editor there are also several interesting and instructive

contributions this month. A further instalment of "A Motor Trip to Central Australia" appears, taking the reader to the stage where the party reached the MacDonnell Ranges and Alice Springs. "Fife and Drum" deals with the Sydney Autumn Meeting, and his account of the Cup is exceptionally good. "Gnome's" Motor Notes this month are in the form of a warning to car owners who are likely to get themselves or their cars into the hands of garage "pirates," and there is also an interesting account in this section of the paper of the aerial survey fleet equipped by Mr. Lebbeus Hordern, of Sydney, to survey the Australian coast. The stud stock pages are very full, containing as they do detailed accounts of the Sydney Royal Show and Cattle Sales, and numerous other topics of interest, such as:—How Stud Stock Prices Have Appreciated, The Hereford in South Africa, Canterbury (N.Z.) Ram Fair, The Shorthorn in New Zealand, Culling Stud Sheep in N.Z., British Live Stock Interests, show reports, dispersal sales, &c., as well as reports of meetings of breed associations at Sydney Show time. A resume of the A.W.U.'s latest shearing demands is given, and also the gist of an important scheme for the amalgamation of producers' organisations. The illustrations in this issue are very good, and include two pages of champions in Sydney, two pages of the famous Tocal (N.S.W.) Hereford stud, a page of Masterton and Dannevirke (N.Z.) show champions, Blood Sires, some fine pictures of Polled Shorthorn cows, and a page of photos of the aerial fleet abovementioned.

* * *

No grower needs to be told of the seriousness of the wool situation, and that the British Australian Wool Realisation

Association was constituted with a view to improving that situation by taking the control of the "carry-over" out of the hands of the Imperial Government, and

by its greater freedom of action, stabilising the market, and expediting the disposal of the surplus. It is also well known that the scheme was not received with marked favour in Bradford, largely, we believe, as the result of a misunderstanding of the real aims and policy of the association. Consequently we are glad to note the advice given by one of the leading members of the trade in England, Mr. Francis Willey, in the course of a speech at a dinner given him in February at Bradford by the British Wool Federation. Speaking with regard to B.A.W.R.A., he begged his hearers not to take too narrow a view of the question. Many interests were involved, and they could not disregard the interests of colonial woolgrowers, who had given of their best, and now deserved liberal and generous consideration. Had the Government, he said, thrown upon the market without any reserve in price the block of wool it held, it would have meant widespread disaster not only throughout the textile

trades, but throughout the producing countries. Mr. Willey is quite right, and it was to avoid the possibility of such a disaster as he mentions that the above association was formed. It is not out to dictate prices, it has no intention of taking a large lump of wool off the market. Its sole object is to get rid of the incubus that is holding up the sale of subsequent clips, without causing any further slump than has already taken place. A lot of wool is now selling below cost of production, and it needs no student of economics to realise that much of that medicine will mean a great decrease in the amount of wool grown. That will be no good to the manufacturer. He must foster the cultivation of wool, for the manufacturing end of the trade is just as dependent on the producing end as the producer is on the manufacturer. We do not underestimate the difficulties faced in Bradford, particularly in regard to labour, which can only be overcome by the latter realising that inexorable laws are in operation, and agreeing to work on terms that will put the industry on its feet once more and provide them with regular and remunerative employment. Therefore the necessity for all-round co-operation is obvious. In a complicated business like the wool trade there must be a certain amount of give and take, and we believe that Mr. Willey's appeal will meet with that response and willingness to co-operate which will help to pull the trade through dark days. The scheme for regulation of offerings and fixation of reasonable selling reserves is dealt with fully elsewhere. We are not overburdened with faith in its practicability, as it is a desperate move to attempt to thwart economic laws, but the position is desperate, and the scheme at least merits a fair trial, which can only be ensured by the co-operation and support of all sections of the trade.

* * *

In another part of this issue we give the particulars of a scheme by Mr. J. W. Allen, secretary of the New South Wales Graziers' Association, for the amalgamation of the numerous organisations representing the interests of primary producers in Australia. We have always advocated this step, and with the growing strength, increasing organisation, and absorptive policy of the A.W.U. during the last few years, it has become more necessary than ever. The A.W.U. is admittedly the industrial and political opponent of all primary producers, and as we stated in a recent leading article, the man on the land can only adequately protect himself against unjustifiable and impossible labour demands by self help and co-operation, rendering him in case of trouble independent of union labour. Such independence can best be achieved by an amalgamation of the producers' organisations as proposed by Mr. Allen, although it is only suggested that the independence should be utilised where union workers refuse to work upon award terms, or in the absence of an award, upon reasonable conditions. Moreover, such a combination of interests would undoubtedly strengthen and make more effective the political activities of the producer—the Country Parties in State and Federal Parliaments. It is therefore necessary that all the States should take similar steps to those of New South Wales. The whole Commonwealth would thus be brought into line, and the scheme could be rounded off and completed by a federation of the associations in each State for the framing and carrying out of common policy, and dealing with matters of Federal concern. Mr. Allen's memorandum on the subject has been submitted to the executive of the Graziers' Association, and the executive have decided to place it on the business paper for the forthcoming annual conference of the

association, and to place it also before the Graziers' Federal Convention. The scheme is of great importance, and we unhesitatingly favour its adoption.

* * *

An important meeting was presided over by Sir Henry Braddon, of Dalgety and Co. Limited, in Sydney at the end of last month, at which it was decided to receive subscriptions for the establishment of a solar radiation observing station at Riverview, near Sydney. A scheme of international observation in solar radiation was some time ago propounded by the head of the Astrophysical Division of the Smithsonian Institute at Washington, U.S.A., and the first definite steps have now been taken to link Australia to it. The tremendous influence on weather forecasting that will be gained by a knowledge of the effects of solar radiation on terrestrial weather is so important to a country like Australia, which depends so largely on climatic conditions for its prosperity or otherwise, that the scheme merits the strongest support, particularly from primary producers. They do not need to be told what it would mean to them to know some time in advance what sort of weather was likely to be experienced. Sir Edgeworth David, the well-known scientist, in warmly commending the project, said it had been almost conclusively shown that the waxing and waning of the sun's heat had a most important bearing upon rainfall. It had been found by observation over a number of years that when there was a falling off in solar heat and a chilling of the atmosphere rain could be looked for. This immensely important fact affected the whole world. In Australia there was very special need for weather forecasting for longer periods than the meteorologists, with their present equipment, were able to undertake. The sun was now under observation at Mount Wilson, near the 120th parallel west of Greenwich; at Calama, in Chile, at 70 deg. west, and with an observatory at Cairo would be under observation at 35 deg. east. Then there was a vast area—one quarter of the earth's surface—from which there would be no record of the sun's heat as the earth rotates unless Australia participated. With an observatory in Australia the sun would be under observation during the whole 24 hours.

On the motion of Mr. Thomas Waddell, M.L.C., an executive committee, consisting of Sir Henry Braddon, Sir Edgeworth David, Professor J. A. Pollock, Professor T. Griffith Taylor, Mr. H. M. Somer, Mr. James Ashton, M.L.C., Mr. John Hain, Mr. James Nangle, Mr. F. D. McMaster, and the mover, was elected to organise the raising of funds for the establishment of a solar radiation observing station at Riverview, and to receive subscriptions. In moving that a subscription list should be opened, Mr. F. D. McMaster, of Dalkeith, Cassilis, N.S.W., said he desired his name to be put down for £100, and an annual donation of £25 towards the upkeep of the observatory. It was mentioned by Sir Henry Braddon that the capital sum required would be only about £5000.

Cash is scarce in these days, but anyone with a little to spare could not invest it to better purpose than by supporting this scheme.

* * *

No doubt as a result of continued protests from the Dominion Government, exporters, and producers' associations, the Imperial Shipping Controller has lately made certain concessions in the matter of frozen meat freights. Full particulars appear in the Meat Trade section of this issue. It is only necessary to say here that the increases announced last month have been cancelled, and that the new schedule corresponds closely with the charges that ruled in January. Also that a rebate of 5 per cent. is to be allowed on freights paid prior to 5th February. The Im-

The Freight Position.

perial control over refrigerated freights terminates the end of April, and assumably from that date charges will be fixed by the individual shipping companies. It is to be hoped that the shipowners will treat exporters in a reasonable spirit. It is recognised that the companies are facing difficult times, but on the other hand it must not be forgotten that the frozen meat trade also has before it specially parlous days. Values of meat in England are rapidly dropping to pre-war levels, while costs in every department have increased abnormally. Shipowners, of course, can say the same, but the position is such that unless the question is faced in a "spirit of sweet reasonableness" there is a danger of high freights killing the trade, as has already happened with rabbits. In 1915 the freight on rabbits was 2s. 7d. per crate, to-day's quotation is 8s. 7d., equalling an increase of no less than 6d. a pair. The trade could not stand such an increase, and had to shut up. For the same to happen with beef and mutton would be little less than a calamity, which should be avoided at almost any cost.

* * *

Meetings of the Producers' Associations' Central Council have recently been held in Sydney, at which detailed consideration has been given to the proposed

Primary Production and the Proposed Tariff. Commonwealth Customs Tariff in its bearing upon primary producers. As a result of these meetings it has been decided to

oppose the proposed increase of duty on meat wraps, iron and steel wire, galvanised iron, barbed wire, wire netting, agricultural and dairying implements, traction and portable engines, dog and rabbit traps, sheep and cattle dips, reaper and binder twine, and corkboard used for insulation of refrigerating chambers. Whilst we recognise that primary producers should contribute their fair share of necessary taxation, nevertheless we consider that where their tools of trade, implements of production, materials used solely in their calling, containers of their produce, &c., are made subject to heavy duties, then they as a class are subjected to taxation that is not shared by the general public. It is recognised that primary products of the land are practically the sole means by which our community exists and prospers, and politicians and public speakers are continually urging the necessity for greater production from our lands, but it does not lend encouragement to the primary producers, when in addition to other taxes, heavy Customs duties are imposed on their tools or implements of production. We do not object to a fair revenue tariff, believing that revenue gathered through the Customs house is the easiest collected and the fairest spread, but any tariff which is so high as to restrict importation becomes useless for the purpose of producing revenue, and if our secondary industries cannot exist when protected by a revenue tariff, plus one or in some cases two long overseas freights (and by the added handling charges), then they become a serious charge upon the community for the benefit of a favoured few, for while our primary products have a world-wide demand, our manufactured products have practically no market outside our own shores. Under normal conditions our wool, meat, wheat, tallow, hides, &c., have a ready overseas market, but our pianos, boots, blankets, &c., cannot stand in the open market. Special objection is taken to the proposal to heavily increase the duty on certain items after 1st January, 1922, particularly when we see the increasing expenditure of the Federal administration, and no word or sign from the Government regarding economy. The whole matter provides an opportunity for the Federal Country Party to test its strength and usefulness in Parliament.

The Queensland Government and its Land Court is quickly getting its answer as to the wisdom of raising pastoral rents—not only in the face of existing conditions—in the utter collapse of the market for wool and by-products, thus affecting the prices of stock and meat in turn. If the position does not recover, those lessees who have been burdened with heavy increases in rents, including a lot of retrospective rent, will be in a difficulty. The good season does not compensate for the losses of markets and the difficulties of disposing of the produce of the land. The court was warned by various witnesses that the good prices for stock, wool, and meat could not be expected to continue, and that it was not fair to base rents for a long period ahead on the conditions existing in the last few years. We are now getting down rapidly to prices ruling many years ago, and with such small incomings, the pastoral tenant will not be able to pay the wages and taxes and rents of an exotic period—not if he is going to make his holding pay.

* * *

At a recent meeting of the Dubbo P.P. Board (N.S.W.), consideration was given to the case of an estate in the district, which was resumed over twelve months ago for soldiers' settlement, and which is still in the possession of the Crown. The complaint of the Board was

Government Blight.

that while the late owner occupied the land it was kept clear of rabbits, but since its resumption the estate had become a breeding ground for the pest. Some time ago the Board issued the usual rate notices, serving them on the Minister, who resented the Board's action. Later, counsel's opinion was sought as to whether the Board could compel the Minister to keep down the rabbit pest on the estate. This opinion was to the effect that the estate was wholly outside the jurisdiction of the Board. The Board now considers that it is unfair on the part of the Crown to be neglectful in such a way as to jeopardise the interests of landholders adjoining the estate in question. This is putting it mildly, to say the least of it. Private owners get into "hot water" for neglecting to do the work of keeping rabbits in check, but Government can do no wrong, and apparently it could allow every pest and disease that the land is heir to, to have a free leg on crown property, and spread throughout the country without considering that any responsibility rested at its door. It is utterly callous, or perhaps lack of practical knowledge is responsible for inability to realise the seriousness of allowing a pest like the rabbit to breed unchecked. Anyway, the Government should take immediate steps to clear its land of the curse, particularly in a closely settled district like Dubbo. The Acting-Premier is being continually baited and importuned by unemployed, and he could well send a few of them to remove the menace created by the Government's indifference to the rabbit's destructive powers.

* * *

The Prime Minister, Mr. Hughes, speaking at the official opening of the Sydney Royal Show last month, said:—

Wages and Industry. "Wages cannot be higher than the market commodity will allow. By no means can industry be continued when wages

paid and conditions of labour will not permit a commodity to be produced on a commercial basis." These are facts, and as Mr. Hughes says, there is no getting away from them. They are with us to-day, and exercise their functions even as they did two thousand years ago. They are basic laws of industry which no tinkering experi-

mentalist or prating politician can influence one iota. Neither can Labour ignore them, and the sooner it is realised that they must be allowed to take their course, the sooner will they bring their own remedy. We hear of shearers and station hands serving fresh demands on woolgrowers in different States, demands for still higher wages. Do the men realise, or realising are they careless, that it is not a question of whether the producer can afford to pay the higher rate asked, but whether he can pay the current rate and still continue producing? Wool, or at least many grades of it, has reached that level referred to by Mr. Hughes, the level at which it can no longer be produced on a profitable basis, the level where its value is below its cost of production. The same state of affairs obtains in regards to many metals, and mines are closing down wholesale, not because the directors and shareholders want a holiday or are tired of making money, but simply because they know if they continue to operate at the present cost of production, a large proportion of which is wages, they will lose money. What does all this stoppage of production mean? It means that unemployment becomes more and more general, and wages stop altogether. Is this better than a wage which industry can afford to pay, adjustable from time to time, the acceptance of which will mean increasing production, cheaper commodities, and a correspondingly greater purchasing power of the sovereign, thus creating real prosperity and contentment, as against the artificial prosperity and dissatisfaction of to-day.

* * *

At last the people of Australia are becoming seized with the folly of Australia's centralisation or congestion in the five big cities of Brisbane, Sydney, Melbourne, Adelaide, and Perth.

*Australia
Subdivided.*

Great areas of country in each State are being penalised continually in order to foster the big capital, perhaps hundreds of miles from them, their produce being dragged at heavy expense over these distances to an unnatural port, whilst close at hand lie untouched or undeveloped ports, with every natural advantage. In North Queensland, northern and southern New South Wales and Riverina, there are now bodies in existence fighting for separation, and they are becoming more aggressive year by year. We have received a pamphlet, "Australia Subdivided" from Glen Innes, N.S.W., and therein the author seeks to show from historical comparison of all continents that the readiest means of securing prosperity is by general subdivision of the huge unwieldy states into workable areas, bringing sympathetic government in all matters that concern their everyday life to the very doors of the people. Decentralisation is the only cure for the stagnation that has settled like a blight over most of the country districts of Australia. For instance, northern New South Wales should have its own shipping port, say Coff's Harbour, with direct rail service thereto. This would be the capital of the new State, which would sell and ship its produce from there, and would thus be independent of Sydney. The Monaro district, and much of eastern Riverina, would ship their produce from Jervis Bay or Eden, which would become attractive cities to live in. Of course any proposal such as the above would meet with the most strenuous opposition from the whole railway service, whose policy throughout Australia is to drag people and produce hundreds of miles out of their way to the one big terminus. It is these railways that are really at the root of the whole trouble of centralisation. Private companies, as they have done wherever they have been given scope, would have opened up every likely port, different systems would have branched out from these ports, and instead of one big city and stagnation in the country of each State, we would have had numerous large railway towns, big ports, and no congestion. Subdivision of our unwieldy States is necessary, but the whole question is overshadowed by the railway policy. We could cut up and subdivide till all's blue, and yet serve no purpose unless each new State formed is served by its own railway system.

The Shorthorn in New Zealand.

South African Visitors' Opinions.

Messrs. E. W. Evans and A. M. Miller, the two South African visitors who recently toured Australia and New Zealand with a view to studying the cattle-raising industry, and purchasing some stud animals, stated in the course of an interview with the "New Zealand Farmer":—

"We have seen fine Hereford stud herds, and are taking from New Zealand and Australia a number of animals of this breed. What we have missed most in New Zealand is the Scots-type Shorthorn. Whatever New Zealand may think, this is an age of specialisation; whether it is milk or beef or wool or mutton, the world wants the best, and the general utility animal—where facilities for the handling of the aforesaid products are available—has become a back number. Wool classing is a concrete science, and the best is known and demanded. The world wants top quality beef, and the man is not born who can foist a fat general utility carcass for a true beefeater with the cuts of prime in the right place, on the Smithfield buyer. New Zealand should be capable of reaching the high water mark in quality and condition where beef animals are concerned, and nothing should satisfy a people possessing this country's magnificent pasturage but the best.

"In almost every part of New Zealand we have heard from farmers that the Shorthorn as a range animal does not maintain its reputation. We understand that there are one or two herds of Scots-topped Shorthorns, and we hope to see them before we leave, but apart from these isolated introductions we do not consider that New Zealand has given the Shorthorn a fair trial. We do not think that the type of Shorthorn we have seen in the North and South Island was ever intended for range purposes. The herds seem to have developed from old Bates types, but the Bates type for range beef production and all it implies—hardiness, capacity to forage, growth under reasonably hard conditions—is outclassed by the modern Scots type. South Africa, in parts no more favourable to beef production than areas we have seen in New Zealand, has succeeded in maintaining the high traditions of the breed in favourable localities, and what South Africa has done New Zealand can do. We are convinced that a careful study of the records would encourage Shorthorn breeders in the Dominion to make a bid for high quality stud herds, but it would mean the jettisoning of the type at present in the country."

Destruction of Rodents and Predatory Animals in U.S.A.

A report of the Department of Agriculture, Washington, U.S.A., states that as a result of a campaign against rodents losses to the estimated extent of £2,000,000 had been prevented during the fiscal year ended 30th June last. At the same time war on predatory animals had saved another £1,200,000. The suppression work is organised in eighteen States, and is in charge of Government inspectors, who co-operate with State and county officials, stockmen's associations, &c.

During the year a force of between 300 to 400 trained hunters and trappers was employed in the destruction of predatory animals. They between them accounted for 21,558 coyotes, 2987 bobcats, 523 wolves, 189 mountain lions, 94 bears, and 10 Canadian lynxes, the skins taken being sold for £8400. In addition to trapping and hunting extensive poisoning operations were conducted in several States, resulting in the destruction of a great many animals, especially coyotes. In some localities coyotes have been so thoroughly eliminated that sheeponers now find it safe to graze their stock without close herding.

The work of rodent eradication has also made steady progress. Areas seriously infested by rodent pests in States west of the Mississippi comprise over 200,000,000 acres. In the campaigns against prairie dogs and ground squirrels during the period in question, 19,117,737 acres of land were given a first poison treatment, and follow up work was done on 15,172,709 acres.

Review of Pastoral Situation.

New South Wales.

SYDNEY, 8th April, 1921.

Steady, soaking and very useful rains have fallen during the past eight days over the whole of the State. They have come at the right time, and were exactly what were required to make the autumn and winter prospects assured. Pastoral conditions are therefore highly satisfactory, and the outlook from a seasonal point of view is undoubtedly good.

With such bounteous rains, which still continue, it is possible that there may be heavy floods in some parts, though there are no indications of these at present. Parts of Riverina and the Upper Hunter district have been suffering from a plague of grasshoppers.

Unemployment.

As the natural result of the present economic conditions, and very largely in consequence of the excessively high wages, there is considerable unemployment. Strikes and industrial disturbances generally have intensified the trouble, and as usual the "out of workers" and the "won't workers" have joined forces for the purpose of levering something out of the Government to relieve the strain. The Government being a Labour one finds itself in a quandary, for during election time all the Labour candidates assured their supporters that upon the assumption of office by Labour there would be a practical cessation of all unemployment.

Labour Ministers have been learning since they took office, and one of the lessons they have absorbed is that high wages and reduced consumption cannot co-exist without producing disaster in some form or other. They know now that high wages and short hours, combined with a reduction of production, are the death knell of commercial prosperity and expansion.

Unfortunately, they seem unable to impart the lesson to their supporters, or at any rate, that section of them who are out of work, and we have in Sydney the constant scene of more or less unruly crowds of men making almost frantic efforts to get hold of the Acting Premier to extract from him a promise of relief in some form or other. When it is realised that increased production and reasonable wages are a solution of the present unemployment problem, there will be a better chance of matters improving in this State.

Further Claims of the A.W.U.

Following upon the unemployment trouble there come the astounding claims of the Australian Workers' Union for shearing and station work. These claims represent from 75 to 150 per cent. increase upon the present award. As everyone knows, that award was made when conditions were highly favourable, when the demand for wool and other station produce was abnormally high, and prices equally so. Now all these conditions are changed. The demand for wool, hides, skins, meat and other pastoral produce is reduced to a minimum. Pastoralists are in the position of having a season's wool on their hands, with no early prospect of its disposal, and the money market being stringent and bankers declining to grant overdrafts the outlook is as gloomy as it is possible to conceive. Yet the A.W.U. recklessly launches its exorbitant demands.

Noxious Weeds.

From various parts of the State come reports of the serious spread of noxious weeds. The value of many holdings has been materially reduced owing to the noxious weeds which are spreading over them from the Crown reserves and other areas, which form nurseries for such things. Although landholders are supposed to keep their properties clear of such pests, their efforts are very much minimised owing to the frequency with which their holdings are encroached upon by the noxious weeds from Crown lands. While private individuals are liable to heavy penalties for failing to check the spread of the pest the Government is allowed to go scot free, notwithstanding the fact that it is the chief delinquent in the matter.

City versus Rural Population.

On the occasion of a recent tour of the executive officers of the Farmers' and Settlers' Association through the Dubbo district, the Mayor of Dubbo expressed the hope that the association would make special efforts to check the drift of the rural population to the cities.

In replying, Mr. W. W. Killen, the president of the association, said there were immense difficulties in the way of checking that drift, and it could only be achieved by all political parties endeavouring to make country life much more attractive than it was now. More encouragement should be given to primary producers in order that the lure of city wages and city pleasures may be in comparison less attractive.

This, of course, would be a step in the right direction, but unfortunately politicians seem to concentrate their efforts upon city development at the expense of the country. The needs and demands of the country, from which the whole State derives its prosperity, are consistently ignored, and will continue to be until a vigorous and fearless country party is brought into existence. The consolidation of country interests with a wide comprehensive policy at the next general elections would do much to secure for the country better recognition and, incidentally, greater development.

The Meat Market.

The drop in the prices at Homebush for cattle and sheep has had a very disturbing effect upon stockowners. Cattle prices at the beginning of this month were lower than they have been for some years, and beef sold as low as 35s. per 100 lbs. Yet graziers are rushing their cattle and sheep into the Homebush yards, the reason probably being that money must be raised by them by hook or by crook in view of other sources of income being closed. Wool, hides, skins and tallow are scarcely negotiable, and the only way of making financial ends meet is by sending in their live stock to Homebush.

If the wool position improved there would probably be shown an immediate improvement in other pastoral produce.

The Proposed Tariff.

At the recent conference of the New South Wales Chambers of Commerce, held in Sydney, strong opposition was shown to the proposed tariff on farming implements. Speakers referred to the hardships of small farmers owing to the present economic conditions, and to have those hardships intensified by unnecessarily high duties on farming appliances would mean serious discouragement to primary production.

The following resolution was carried:—

"That this conference of Chambers of Commerce of New South Wales urges the Federal Government to refrain from imposing the proposed high protective tariff on farming implements, as it is considered that this action is prejudicial to the best interests of the primary producers of the Commonwealth."

Irrigation Commission.

Important changes, both in the personnel and the functions of the State Irrigation Commission, have now been decided upon by the Government.

An independent business man is to be appointed to preside over the work of the commission, in lieu of the function of chairmanship, hitherto exercised by the Minister. There is to be an engineering commissioner and a resident commissioner to sit with the new chairman. Parliament will also be asked to sanction the writing off of a large amount of the initial capital outlay.

Another important change in the method of administration is the creation of an executive board for the management of the Murrumbidgee irrigation areas. This board will sit under the chairmanship of the Resident Commissioner, who will represent the State. It will consist of elected representatives only, there being no officials on the board other than the Resident Commissioner.

From a convenient date (probably the end of the present financial year) the capital will be fixed at an amount which is considered reasonable as between the State and the people resident on the irrigation areas, and the proposition will be expected to pay on a reduced capital basis.

Under the new scheme the Murrumbidgee irrigation areas will in effect be a co-operatively managed concern, the State bearing a reasonable portion of the interest charge as a set-off for the many direct and indirect benefits received by the State.

Victoria.

MELBOURNE, 11th April, 1921.

The northern districts of the State experienced good rain-falls, spread well over the month, during March, but the southern half was not so fortunate, as the mean average was considerably below normal. The average over the Western District was barely an inch for the whole month, and over central and Gippsland it was little more than an inch and a-half. Through the Wimmera, Mallee, and northern belt the fall was well over the average. Light rains have fallen since the end of March, which have been useful to the farmers. Pastures are still in good heart, but heavy, soaking rains are now required to secure winter feed, and to enable the wheatgrowers to get on with their cultivation and sowing.

Hay and Fallow.

The Department of Agriculture have been conducting experiments in oaten hay growing at their research farm at Werribee, covering a period of seven years. The results of these experiments have been published, and are very interesting and instructive. Four different methods of cropping were tested during the period, namely:—1, Hay, grown continuously; 2, alternating with bare fallow; 3, after barley and bare fallow; 4, after barley and peas. Considerable differences in the yield of the main crop (oaten hay) were observed in these varying rotation systems, as the following table will show:—

Rotation System.	Yield. 1920.	Average Yield Last 7 Years.
Hay continuously	13.9 cwt.	23.9 cwt.
Hay after bare fallow	51.4 cwt.	48.3 cwt.
Hay after barley and bare fallow..	58.9 cwt.	49.7 cwt.
Hay after barley and peas	26.2 cwt.	32.5 cwt.

Yet more significant are the figures showing the net financial returns to be expected from a farm under each of these systems, which have been worked out on a 300-acre farm. The actual cost of all the operations has been determined from the records of the farm, and in determining the returns average prices have been taken for all products. The average net profit from such a farm over the seven years, after allowing all costs, including labour, seed, manure, rent of land, interest on capital, &c., was as follows:—

Cropping System.	Average Return Per Year.
Hay grown continuously	£184
Hay after bare fallow	380
Hay after barley and bare fallow ..	314
Hay after barley and peas	120

From these returns it will be seen that the farm on which 150 acres are sown, on a well worked bare fallow, gives a net profit more than double that of the farm where the whole of the 300 acres is seeded each year. The average rainfall at Werribee for the period under review was 20.25 inches. Oaten hay is generally sown on stubble land in Victoria. The average yield for the State for the past seven years was 1.26 tons. This yield is practically the same as that obtained at Werribee by growing hay continuously.

Noxious Weeds.

The Government's bill dealing with noxious weeds and other pests is not meeting with all round approval. Under the bill it is proposed that the State should be divided into five areas, each area to have a divisional council of five municipal councillors to enforce the provisions of the act.

Mr. R. Cook, M.P., at a meeting of the executive of the Municipal Association of Victoria, freely criticised the provisions. He declared that the bill would create another Government department with increased national expenditure. He recommended that the Vermin Destruction Act should remain in its present form, and that instead of divisional councils an inspector be appointed for each of the five areas to supervise and direct the work of municipal officers. Mr. Cook's views have been adopted by the association and placed before the Minister for Lands.

The last Noxious Weeds Bill, fathered by the Government, was dropped owing to adverse municipal criticism, and a delay of some years ensued in dealing with the problem. In the meantime many pests are spreading and eating up valuable pastures; Patterson's curse, on the Upper Murray flats, St. John's wort through the Ovens and adjoining shires, and stinkwort in the Goulburn Valley.

Shipping Wheat.

The question of bulk handling is referred to in the twenty-second annual report of the Chamber of Agriculture, and the necessity for an early installation in this State is to be considered at the Farmers' Convention this week. The hope is expressed that the delegates at the convention will reaffirm their determination to continue urging the Government to have terminal silos erected as soon as possible, and to extend the system to country centres without delay. Whilst the Chamber stands for decentralisation, it is held that the despatch of trial shipments of wheat from Portland is simply trifling with a very important policy. A breakwater, the report says, is urgently required, and it is hoped sufficient local support will be forthcoming to justify the Government in providing the necessary financial assistance. Otherwise the costly pier and additional railway connections will have been provided in vain, and Wimmera wheat and Western District wool will still have to be conveyed away from their natural port of shipment.

Live Stock Markets.

Since last issue four sales of sheep, lamb, and cattle have been held at Newmarket, with a total offering of 119,010 sheep, 46,120 lambs, and 10,160 cattle, as against 132,540 sheep, 63,770 lambs, 10,260 cattle for the previous month.

The following are the prices at the sales held on the 6th inst.:—Prime crossbred wethers, 24s. to 26s.; prime crossbred ewes, 19s. to 22s.; best Merino wethers, 22s. to 26s.; prime lambs, 22s. to 26s.; best pens of bullocks, £18 10s. to £19 15s.; good pens of bullocks, £14 10s. to £17 10s.; prime pens of cows, £13 to £14 10s.

Notes.

The following gentlemen have been appointed to the Crown Lands' Investigation Committee:—The Assistant Minister of Water Supply (Mr. Angus), Messrs. W. McIver (Director of Soldier Settlement), A. A. Peverill (Under-secretary for Lands), A. B. Lang (Surveyor-General), E. W. Samson (Chief Valuer), and a representative of the Returned Soldiers' League.

The removal of the Newmarket stockyards to a site at which proper railway facilities can be provided is considered by the Chamber of Commerce in its annual report to be a matter that should receive prompt attention. Vested interests, represented by Melbourne City Council, strongly oppose any change. The solution suggested is to join with the Railway Department in establishing a market where stock can be handled expeditiously, losses through injury reduced to a minimum, and the levying of extortionate market dues rendered impossible.

The Cranbourne Shire Council recently circularised other shire councils in regard to a scheme of insurance against loss to dairymen through the destruction of animals owing to pleuropneumonia. The members of the council waited on the Minister and asked for legislation providing for compulsory contributions to an insurance fund, it being claimed that the majority of the councils circularised had approved of the scheme. Owing to a recent outbreak of the disease, it was stated, one dairyman had lost £3000. The Minister stated that he had been considering the matter, and advised Cranbourne Council to convene a conference or public meeting with dairymen, with the object of placing the scheme on a sound basis.

Queensland.

BRISBANE, 6th April, 1921.

The month has been an extraordinary one in respect to rainfall. Two periods resembling in every particular the usual wet seasonal visitation swept over the State, being exceptionally heavy in the western and coastal districts, especially the far northern coast, where the falls were quite extraordinary, causing floods. On the other hand there were some localities where the fall was quite small, though the districts surrounding had good rains. A strange case was the basin of the Logan and Albert Rivers. The falls on the Darling Downs were also small, and the outlook at one stage not at all good. On the outer edges the falls were much better, being over 4 inches in places. The Toowoomba end also

had good rains, but the Warwick end remained dry. The coastal region had upwards of 9 inches, the sugar district of Nambour having nearly 14 inches.

Three to four inches was the average in the Wide Bay and Burnett. The Maranoa had about 3 inches—some places more, but the south-west had rains which caused floods. Adavale had nearly 8 inches, Cunnamulla $7\frac{1}{2}$ inches, and others like measure. The water got over the railway line at Quilpie, causing some delay to traffic. Adavale was cut off from communication for a time. The Minister for Lands, who visited the south-west recently, described the conditions as the best he has seen in 31 years. There is abundance of grass and water. (Further almost general falls were reported on the 7th and 8th inst., being cyclonic and torrential in places on the coast, particularly in the southern division.—Ed.)

State Enterprises.

It is announced that the State Fish Market has been offered to the Fishermen's Association as a going concern, with a return to the old open market system. The State Fisheries Department proposes to purchase its fish at auction. The market showed a loss of £8438 last year. Taking all the circumstances into consideration, it is a fair deduction that the Government has become tired of State enterprises which show no signs of paying. It can only make the State meat shops pay by forcing the meat companies to give it meat at lower than ruling rates.

Government Buyer in the Yards.

Some sensation was created at the Enoggera saleyards recently by the appearance of the manager of the State stations as a buyer of stock for killing. As a result the market became firmer. It was said that he purchased 33 head, but the impression was that the purchases were much greater. Arrangements were made to have these stock treated in one of the metropolitan slaughter yards. The reason for the intrusion is not quite apparent. It was said that it was to enable the market to become firmer for the State cattle to be sent down. The Minister stated that the meat was for the State shops, and that the experiment had worked out quite satisfactorily, as compared with meat obtained through the works. The Minister confessed that the Government had no settled plan, but would act as occasion directed. It was said by one writer that the figures quoted by the Minister were absurd, and he challenged him to deny that he was getting the cattle treated at a slaughter yards at 15s. per head, while the cost through any meatworks was double that amount.

Collective Purchases at Enoggera.

A few weeks ago the secretary of the Queensland Meat Traders' Association received the following letter from the secretary of the Brisbane Fat Stock and Produce Agents' Association:—

Attention has been drawn to cases in which a buyer of stock at the yards requests the selling agent to book a certain number of his purchases to one or more butchers. It is contended that, in the interests of both agents and buyers, this practice should be discontinued immediately. I am directed, therefore to write you that, in future, pens of stock knocked down at auction will be invoiced only to the buyer of same, and that under no circumstances will transfer to butchers be recognised.

The change was also verbally announced at the sales. A complaint was made by the pastoralists supplying the yards with stock that the practice existing did not allow of competition. The butchers, on the other hand, contended that the practice had stimulated the market when the butchers had full supplies and the demand was dull.

A Hint Regarding Resumptions.

A case in which an owner claimed £6000 compensation in respect to a resumption of land valued for taxation purposes at £2500, drew from the Treasurer a suggestion that local authorities should ask the Government to exercise its power to resume at the taxation value, plus 10 per cent.

Wheat Crop.

In the Maranoa district, where the season has been a good one, an increased area of wheat is being sown this year. The State farm there has produced a number of fine wheats suitable for the locality. On the Darling Downs, where the

conditions are also favourable, there should be a good yield, though the difficulty of getting away the recent record crop is in the way of further expansion. The crop for the first time provided enough wheat for export, necessitating the creation of a pool.

Hides.

Some of the meatworks had very large quantities of hides in stock when the slump took place. It is now said that efforts are being made to reduce the total. The A.M.E. Co. is drying large quantities, and the Q.M.E. Co. has had part of its stock tanned for export.

Live Stock Markets.

Four sales were held at Enoggera during March, a total of 29,800 sheep, 3730 lambs, 4450 cattle, and 537 calves being yarded. The following are latest quotations:—Three-quarter to full-woolled Merino wethers, 11s. to 20s.; half-woolled Merino wethers, 10s. to 19s. 3d.; quarter-woolled Merino wethers, 9s. 6d. to 17s. 6d.; full-woolled crossbred wethers, 17s. 6d. to 22s. 3d.; three-quarter-woolled crossbred wethers, 14s. 6d. to 23s. 3d.; half-woolled crossbred wethers, 15s. 3d. to 21s. 6d.; prime lambs, 16s. to 19s. 3d.; good lambs, 12s. to 15s.; light lambs, 7s. 6d. to 10s. 6d.; prime heavy bullocks, £15 to £16 12s. 6d.; prime bullocks, £12 to £13 10s.; good bullocks, £10 to £11 10s.; light bullocks, £7 to £9; prime extra heavy cows, to £11 7s. 6d.; prime cows, £6 7s. 6d. to £7 7s. 6d.; good cows, £5 to £6; light cows, to £4; calves, vealers, and weaners, 7s. 6d. to 60s.

Notes.

The maize crop in the southern district, in parts, has not been a success. In other portions the conditions remained favourable for a good crop.

A demonstration to be given at Dalmally Station during the second week in August to demonstrate the methods that have been adopted to combat the ravages of the sheep fly will be conducted under the auspices of the special Blowfly Committee of the Commonwealth Institute of Science and Industry. Graziers from all parts of Australia are to be invited to be present.

CENTRAL.

All parts of the central district participated in the rains, though one or two places remained somewhat dry as compared with others. Rockhampton was suffering somewhat in the early part of the month, but finished up with 384 points. Emerald had little rain, but all the districts around it benefited. The coastal districts are in splendid condition, except for a stretch near Mr. Larcom. In the early part of the month the western districts were beginning to look dry, but splendid rains afterwards fell, many of the places having five or six inches or more.

Station Hands' Award.

An application has been lodged by the A.W.U. for another award for shearers and station hands. The amounts asked for are a great advance on the existing award, amounting in some cases to 50 per cent.

Note.

A dip has been established at Muttaborra to enable the infested area there to be cleaned up. The dip will also give a third stock route to the south—from Hughenden via Landsborough and Muttaborra.

NORTHERN.

The month was noted for the heavy rain on the far north coast. The sugar districts suffered from floods as a result. Innisfail had the great record of 62.62 inches, while Cairns had over 32 inches. Proserpine received nearly 27 inches, and Mackay 28½ inches. Other districts had similar good falls. These records are far in advance of the average for March. Over the Peninsula the falls averaged 10 inches, but in the Carpentaria the falls, though good in all cases, were variable. The western districts, even out as far as the border, had good rains. Camooweal, for instance, had over 3 inches, and this was the average in the Cloncurry district. Buyers have been out after stock in the western areas, but stock will not get on the move until the wet season is over.

State Meat Shop Strike.

The employees of the State meat shops at Townsville have been on strike for four months. The Minister in charge of State enterprises was recently in Townsville, and he now announces that the strike has been settled on the Govern-

ment's terms. The strike took place owing to the dismissal of one of the employees, who was accused of giving overweight. The employees of the four State shops in Townsville were called out, and the union stated that the men would not resume until the dismissed man had been reinstated. The terms of the settlement are that the men shall resume and an inquiry be held to decide whether the dismissal was justified: the manager to have the right to choose what men he requires. It was recently stated that the men would resume on certain terms, one of which was that free meat was to be given them. There is nothing of this in the Ministerial announcement.

Stock Diseases.

The Government Veterinary Surgeon in the north recently visited the Gulf country to investigate the reported "walk about" disease in horses. The disease breaks out suddenly; a number of cases occur, and then it disappears again. Usually the animal is dead within three days. It is confined to the Gilbert River district, and it is concluded that it is due to some plant. The veterinary spent ten days at Strathmore Station, but was unable to discover any cases or the cause of the previous cases.

Deaths of cattle recently occurred on Balfe's Creek, and specimens of the weeds of the genus *Phyllanthus laevispermus*, which it was thought might have been the cause of the trouble, were sent to the Government botanist, who, however, could not find any record of the genus in Australia being poisonous. The agricultural chemist made an investigation and could not find any trace of hydrocyanic acid.

Some stock were lost in the Yalleroi district, but the local stock inspector was notified that it was not necessary to quarantine the place, as the disease is not infectious. The removal of the stock to fresh pastures resulted in their recovery.

The disease, which is of French origin, and known as petechel fever, is new to Queensland, though it has been previously reported in Victoria. The symptoms consist of enormous swellings of the whole beast, the head assuming gigantic proportions, and the legs becoming "thick as tree trunks."

A Labour Repudiation.

When the conference of representatives of Governments and persons interested in the sugar industry met in Brisbane recently to fix the price to be charged for raw sugar the A.W.U. showed up in a very unfavourable light. The understanding at the outset of the new agreement a year ago, when an increased price was given to encourage the cultivation of sugar, was that there should not be any increase in wages unless based on the increased cost of living. The union representatives made an excuse of the Federal Basic Wage Commission's report to demand higher rates, which were said to be 8s. per week, but really 30 per cent., some of the men asking £9 per week for certain work. The Federal Government's representative very properly put down his foot. He showed that from Knibbs' figures the cost of living had gone down in Queensland, and said that if the union persisted in its claim, and the court raised the wages in the industry in face of the agreement, the Federal Government would consider the question of abandoning the sugar industry. It is now for the Arbitration Court to say what it will do under such circumstances.

Note.

Representatives of about thirty families from the Mullumbimby and Bilyndgel districts in New South Wales are now making an inspection of the Atherton tableland with a view to settling there. The district is somewhat similar to the north coast district of New South Wales, into which there was a migration about thirty years ago. Some of the men interested are returned soldiers with families.

South Australia.

ADELAIDE, 7th April, 1921.

After a long and dry summer the weather broke about the middle of March, and autumn conditions now prevail. Although the weather reports and rainfall map for March show a good general distribution over the State, practically the whole of the rain fell towards the end of February and on the first day of March. Since then, with the exception of light showers in isolated places, the weather was warm and dry during the greater portion of March, and cool and dry

towards the end of the month and during the first week in April. The summer rains, however, on top of the exceptional season last year, have been quite sufficient to keep the country in good heart, and conditions generally are reported to be satisfactory for stockowners and producers of all classes. At the time of writing, the Weather Bureau is forecasting that a complete break in the season is imminent, so that with anything like fair rains during April the season should get an excellent start. Water supplies are plentiful, and grass and herbage good almost generally, so that stock everywhere are in good condition, and supplies coming to market are more than enough to meet all demands.

[8th April.—After posting the above letter news reached Adelaide that the rains predicted by the Weather Bureau had been realised in the northern part of South Australia and westward along the East-West line. Hesso, on the East-West line, recorded 2.97 inches; Wilmington, 2.55; Craddock, 2.04; Gordon, 2.00; Quorn, 1.95; Port Augusta West, 1.95; Port Augusta, 1.90; Bruce, 1.88; and Hammond, 1.77. The north-east pastoral country was also visited, but up to the present Waukaringa is the only station that has reported over an inch. The lower north seems to have been missed, but in the centre of Eyre Peninsula—what is known as the west coast of South Australia—Kimba had 1.14, and Dark's Peak 1.09. Good rains have also been reported along the South Australian and New South Wales border. The West Darling country generally has had a wonderfully good rain, so that following on the downpour reported a little while back that country is assured for the rest of the year so far as feed and water are concerned. Several railway washaways are reported in the far north, resulting in trains being held up. These latest rains will assure the lambing in the pastoral districts visited.]

The Rural Outlook.

Producers of all classes whilst greatly favoured with natural conditions are much concerned over the movements of the markets. The price of sheep has dropped several shillings per head during the last few weeks, and in the event of there being a surplus of lambs, prices will come down to export parity, which would probably mean a lower level than has prevailed in these markets for many years. Merino sheepskins are being quoted at least 10s. below the ruling rates of twelve months ago, whilst owing to the good rains, all the stock routes are open, thus allowing the markets to be flooded with fat cattle, with the result that beef prices are also on the down grade.

In addition to the weakening markets for meat, hides and skins, sheepowners are much concerned at the conditions of the wool markets and the outlook generally for the sale of this product. Although the prospects for the coming clip are promising, it looks as if incomes from the sale of wool will suffer a very heavy reduction during the present year.

Agriculturists in this State, who reaped their second largest crop a few months ago, have had the satisfaction of receiving high prices for as much of their produce as has been sold, and many of them will reap handsome returns from the last harvest. That this is encouraging them to again put in a large area under wheat is shown by the fact that the railways are faced with the problem of transporting 70,000 tons of fertilisers to the grain-growing districts during the next few weeks. Exceptionally heavy orders have reached manufacturers, which go to indicate that seeding operations are contemplated on a large scale.

State Politics.

A new State Parliament is to be elected on 9th inst. For several weeks past the various parties have been appealing to the electors, but generally speaking the contest is reduced to a struggle between the Liberal Party at present in power, and the Socialistic Labour Party. What is known as the block vote system prevails in this State, so that where there are more than two parties in the field vote-splitting takes place, and there is the danger of a minority vote not only electing individual members in given districts, but returning a party to power on a minority vote. As in many districts there are more than two sets of candidates in the field, Labour goes to the poll with a distinct advantage, since the political cross currents almost invariably cut into the Liberal majority. The leader of the Labour Party, in

his policy speech, indicated increased land taxation with "special attention to pastoral leases," so that it looks as if the experience of the Labour Party in Queensland has not been fully appreciated by their "comrades" in this State.

[Since the above was in print the result of the South Australian elections has been made known. In a House of 46 the Liberals claim 30 seats, and the Labour Party 16 seats, so that the result of the election will be a Liberal Ministry for South Australia for the next three years.]

Big Shipments of Grain.

Large quantities of grain have been moved by the railways to the various shipping ports, of which this State has an exceptional number, and the export trade has been busily engaged in getting the wheat ships away. Shipments during the first three months of the year have been exceptionally heavy, and it is expected that this rate of export will go on for the next two or three months. Every effort is being made to get away as large a quantity as possible, and it is hoped that these heavy grain shipments will have a marked effect upon exchange rates and Australian finance generally.

General.

A report has reached Adelaide of a slight outbreak of pleuro in a large mob of cattle travelling through the West Darling country. The stock inspector condemned eight animals and had them destroyed.

The committee of the Royal Show are seriously considering abandoning the March fixture, and concentrating on the Spring Show. The autumn engagement has not been satisfactory for some time past, and it is thought that it would be better to only hold the show once a year. The dates for the September Show had already been fixed before it was discovered that these would clash with the Jubilee Show to be held in Melbourne.

Live Stock Markets.

At this week's live stock market 882 cattle were yarded, being about 100 less than usual. There was a good attendance of the trade, and bidding was brisk—up to 52s. to 54s. per 100 lbs. for the best sorts.

A little over 14,000 sheep were yarded, including a few fair-sized consignments from stations in the north and north-west, and most of these were in prime order. The supply of sheep generally was better than usual, and the quality of a superior character. Prices generally were easier for all classes, particularly second grades.

The quotations are on the following basis:—

Cattle.—Prime bullocks, £17 to £21; good, £14 to £16 10s.; prime cows, £11 10s. to £13 10s.; good, £9 10s. to £11.

Sheep.—Prime Merino wethers, £1 8s. to £1 11s.; good, £1 2s. to £1 4s.; prime Merino ewes, £1 4s. to £1 8s.; good, 18s. to £1 2s.; prime crossbred wethers, £1 8s. to £1 11s.; good, £1 3s. to £1 6s.; prime crossbred lambs, £1 2s. to £1 5s.; good, 17s. to £1 1s.

Western Australia.

PERTH, 31st March, 1921.

The Season.

The summer throughout the State has been of a most exceptional character. We had a spell of unusually hot weather early in December, followed by a remarkably cool and pleasant three weeks, including Christmas. Then followed a series of heat waves, in which some records were established. The peculiar feature was not the degree of heat, but the humidity. Instead of having pronounced changes after a heat wave, one wave followed another without any very decided relief. Normally the cyclonic disturbances or "lows" usually pass well inland; this year they pass out at sea and down round the Leeuwin, only giving slight changes on the south-west coast.

The season through the agricultural areas has been drier than usual, not so much on account of the unusual dryness of the distinct summer months, but because the dry weather started at least a month or six weeks earlier than usual. The result was that the crops, although average, were not as heavy as had been expected. Usually our rains continue well on to October; this year they stopped early in September. A better condition of things has prevailed in the north-west, where the country depends upon the monsoons for its summer

rains. The Kimberleys, the De Grey, the Fortescue, and West Gascoyne have been blessed with beautiful and plentiful rains, and nearly everywhere the conditions for stock are really good.

In the Murchison country the people depend more on the winter rains than on the summer rains, although they should get both. Conditions in the Lower Murchison are fairly good, they having had good winter rains last season and some good summer rains. The Middle Murchison is also fairly good, but as we pass westward and north-westward conditions are much worse, and the Upper Murchison may be described as bad, there having been no good rains for two seasons, and of course there will be no increase in sheep. The actual area which may be described in this way is small compared to that where the conditions are from fair to very good, but still the fact must be related. The stock routes around Meekatharra have no feed, and stock cannot travel from the northern districts on account of 100 miles of bad country. At the time of writing there is every possibility of another of the monsoonal depressions pressing in south-east, and at the time this appears it will be no great surprise if the conditions on the Murchison should have changed. (The hoped-for rains have not materialised.—Ed.)

Conditions in the agricultural areas, or what is known as the south-west, i.e., from the Murchison to the south coast, and for some distance inland, are on the whole satisfactory. Owing to the absence of sufficient dams and tanks, the water supply of many farmers is short, and they are longing for rain. Others who have water, however, hope that the rain will hold off for some weeks longer, because it is found that for the regular autumn rains to come too early is not altogether a good thing. Heavy early rains are good for stock, but they are not good for cropping; therefore we have a certain amount of antagonism between the two interests. This is rather contradictory, because the quantity of stock being kept in the agricultural areas is increasing year by year, and while the farmer may not want rain for his cropping, he may strongly desire it on account of his stock.

North-West Cattle Trade.

The first north-west boat carrying cattle landed her cargo a few days ago at Fremantle. She was unusually early, and because the cattle had had to travel in exceedingly hot weather to the shipping port, and the boat herself had had a hot passage, they did not land in the best condition.

There is no lack of cattle in the north-west this year in good condition, and there will probably be a plentiful supply of boats, so that there is just a danger of an over-supply and a drop in prices. The freights range from £5 to £6 10s. There are very few sheep of good quality to come from the northern ports, but the agricultural areas are able to supply requirements for the metropolitan and goldfields markets. Unfortunately a good proportion of the sheep yarded at the metropolitan markets have not been quite up to standard.

Wheat Prices and the Wheat Pool.

The question which is causing a good deal of discussion and heartburning in Western Australia, as in the other States, is the price of wheat for home consumption as against the world's parity. When the world's parity was high of course the farmer wanted local prices to be brought up. Now that the world's parity has dropped below the fixed price of 9s., he takes the opposite side. This is only another example of the evil of attempting to regulate world-wide matters. If it is right for the farmer to take below world's parity when that happens very rarely to be high, it is right for the local consumer to pay him a profitable price for raising wheat when the world's parity is so low that he has to carry on farming with little or no profit. However, the problem in Western Australia is much the same as in the other States, and nothing more need be said.

One point in connection with the Wheat Pool may be mentioned, and that is the fact that Mr. Sinclair McGibbon, who formerly represented the State on the Wheat Board, was displaced by the Government some time ago, because he and the Honorary Minister, Mr. Baxter, were at loggerheads, and Mr. Baxter was at loggerheads with the Farmers' and Settlers' Association. An election has been held, and owing

to the heavy backing of the Farmers' and Settlers' Association, Mr. McGibbon has been elected as the State representative. Whether he will sit or not, or what will happen, is not known. Mr. McGibbon is auditor, and therefore a paid servant of the Westralian Farmers Limited, who are contractors for the handling of the wheat. When he was originally appointed, in addition to being a public accountant, he owned a wheat farm, but he sold that to the Repatriation Department, and it is now said that he is not a wheatgrower, and therefore not eligible for the position. Whether either of these objections is sound no one seems to know, and it is probably a point where lawyers will be able to argue either way with equal facility. As Mr. Baxter has said that he cannot work with Mr. McGibbon, possibly, in the reshuffling of portfolios, Mr. Baxter will be relieved of the control of the Wheat Pool business, or it is possible that Mr. McGibbon, having triumphed over his opponent, may say he no longer wants the position.

Shearing Rates.

[April 11—For some time the Pastoralists' Association have been endeavouring to arrive at a shearing agreement with the Australian Workers' Union, and they have now unanimously decided not to commence shearing, unless under last year's agreement and rates. The A.W.U. had previously resolved that there would be no shearing except at rates considerably higher than those of 1920. The pastoralists state that the wool pool has more wool on hand than can be disposed of in two years, the price is lower than in 1914, and that station and shearing costs in 1920 were nearly 80 per cent. more than in 1914.]

The Elections.

The most outstanding event of the month has been the general elections. In six electorates there was no opposition, but for the forty-four remaining seats there were no fewer than 135 candidates, as against 115 for forty seats in 1917.

The new Parliament includes thirteen men fresh to Parliamentary work, and is grouped as direct Nationalists 10, National Labour 5, Country Party 16, making 31 direct followers of the present Government, as against 17 of the Official Labour Party or Oppositionists. In addition, there is one Independent Country Party member and one Independent National Labour member. Besides losing his Attorney-General, Mr. Mitchell, the Premier lost an Honorary Minister in the person of Mr. Willmott, who was defeated in the Nelson district. Mr. Willmott was the representative of the Country Party, and Mr. Smith, who defeated him, was an Independent Country Party candidate. The new Parliament has lost at least two red raggers or extremists on the Labour side, whose places have been taken by moderate men of the same party, or National Labour. Taken altogether, the new men comprise some of undoubted ability, who will be an acquisition to Parliament, but the election will probably not result in any material change in policy.

New Zealand.

(FROM OUR OWN CORRESPONDENT.)

CHRISTCHURCH, 1st April, 1921.

AUCKLAND.

Except on the east coast, where there was rain early in the month, the province during the last few weeks has been in a very dry state, and feed is scarce. The dairy farmers have had a profitable season, but with the shortage of feed the outlook for cows during the winter is not very satisfactory where provision has not been made for the moist part of the year. The live stock markets are in a very depressed state, and as there will be a large number of stock held over on account of the limited operations of freezing buyers, the winter feed question will have to be faced. With rains during the next month there is likely to be still some growth in a warm climate like that of the greater part of the Auckland province.

Stock on the South-east Coast.

A recent visitor to the Tolaga Bay district, on the south-east coast of Auckland, noted the excellent herds of cattle to be seen on the well pastured hills. For the most part

they are Aberdeen-Angus, which appear to have an increasing vogue on the coast, but some excellent types of Hereford are also to be observed. Station breeding, where the policy of securing good bulls has been followed for years, accounts for the good standard, as all the bulls used up the coast were bred on the Williams' Stations. The Romney rams in the bulk of the flocks have been secured from the best known Wairarapa flocks, so that the district possesses a distinct advantage in the fine class of stock now in use.

Fat Stock Prices.

At the Westfield (Auckland) fat stock market prime beef now down to 34s. to 39s. per 100 lbs., extra prime being worth 1s. more; heifer beef, 28s. to 35s.; and cow, 19s. to 27s. Prime light bullocks are making £12 to £15 5s.; medium, £7 10s. to £11 10s.; prime cows and heifers, £5 to £8 10s.; prime wethers, 25s. to 28s.; medium, 22s. to 24s. 6d.; prime ewes, 21s. to 23s. 9d.; medium, 18s. to 20s. 6d.; prime lambs, 20s. to 23s. 3d.; medium 17s. to 19s. 9d.

TARANAKI.

The weather has also been dry in the dairying province of Taranaki, and cows have been going off rapidly in their milk supply. A good quantity of hay has been saved, and more provision has been made for growing winter feed, as dairymen now realise that on high-priced land the cows must be well looked after all the year round to give profitable returns. There have been heavy losses on stock held for sale, and it all depends upon how next season's prices rule whether dairy cows will maintain their values or not.

HAWKES BAY.

The Hawkes Bay province has experienced one of its dry seasons, and this at a time when it has turned out that feed will be required upon which to carry the large number of stock that have failed to find a market, either as fats or stores. The pastures have a very burnt-up appearance this autumn, but crops have turned out very well. Oats particularly have furnished good returns, and Hawkes Bay oat-sheaf chaff is at present shutting the South Island product from the Auckland market. The only business being done at the usual stock sales is on a very low level of prices.

Labour and Rates.

At a meeting of the Hawkes Bay County Council a member said they would either have to reduce the number of men employed or reduce their wages. There were farmers in his riding who were working 16 hours per day, and not making 16d. in a year. Some of them said they had no possible chance of paying rates next year. The chairman said he was quite satisfied that they would have to try to do with a lower rate in most of the ridings, owing to the financial strain. Perhaps it would be necessary to neglect the roads somewhat and do the least work possible for a time. The last increase in wages represented £3000 a year, and the council could not do much new work now owing to the wages that had to be paid. He was convinced that the time had arrived when the settlers could not continue paying the high rates, and many of them would be hard put to it to meet their ordinary financial obligations.

WELLINGTON.

There were good rains at the beginning of the month, and pastures obtained a renewal of feed, but there has since been another dry spell until this last week, when there were rains from the north-west. The east coast districts have been fairly well off for feed, and the late rains will improve feed prospects generally, not only so far as the pastures are concerned, but also as to turnip crops. Some farmers are having their fat stock frozen on their own account, but others prefer to accept whatever price is offering, and that is only a very low one.

The dairy season is coming to a close, the late dry spell having shortened the milk supply considerably. The butter contract with the Imperial Government ended on 31st March, and the general impression is that there will be barely enough butter now made to suffice requirements in the Dominion until next spring. It is not anticipated, however, that retail prices will increase. The serious falls in wool,

meat and live stock, and the tightness of money is causing a very anxious time, and no one can say whether matters will improve or get worse before the year is out. That there will be some unemployment there is no doubt, especially as there are large numbers of immigrants on their way to the Dominion.

The Shearers' Dispute.

The dispute between the Sheepowners' Federation and the New Zealand Workers' Union in regard to the shearers' demands for increased wages and improved conditions still remains unsettled. Recently the shearers asked for a forty-four hour week and pay at the rate of 35s. a hundred. The Federation offered 20s. a hundred, and the offer was declined. The secretary of the Workers' Union stated the other day that the men were determined not to accept work except on the basis of their own demands, and that any further move for the settlement of the dispute would have to come from the employers' side.

Occupied Holdings.

A return published by the Government shows the total area of occupied holdings in the Dominion to be 43,473,079 acres. Of this one-eighth is held in areas of over 50,000 acres. The principal large areas are in the mountainous country of Canterbury and Otago. In the Taranaki land district there is not a single holding of over 10,000 acres, and comparatively few holdings between 3000 and 10,000 acres. In Hawkes Bay, on the other hand, over a million acres are held in areas of from 10,000 acres upwards, and in the Wellington district over 700,000 acres. Taking the Dominion as a whole, there are 15,041,817 acres, or more than a third of the total occupied land, held in areas of 10,000 acres upwards.

Lice Among Sheep.

The reports coming in from its inspectors have satisfied the Live Stock Division of the Department of Agriculture that the infestation of sheep by lice has been largely on the increase during recent years. This may have been inevitable during the war, when, on account of the scarcity of labour, some of the precautions against the pest were relaxed, but active measures now have been resumed by the Department, and Colonel Young, the head of the Live Stock Division, is advising flockowners to clean their sheep before the inspectors are compelled to advise prosecutions.

Wheat and Bread Prices.

The Government has fixed the following maximum prices for this season's wheat:—7s. 6d. a bushel f.o.b. southern ports for Tuscan and similar varieties; 7s. 9d. a bushel f.o.b. southern ports for Hunters and similar varieties; 8s. a bushel f.o.b. southern ports for Pearl and similar varieties. These prices are with increments of three farthings a month, commencing from 1st May, 1921. The request for a guarantee for the 1921-22 season has also been dealt with by Cabinet, and it has been agreed to guarantee the following minimum prices:—5s. 6d. per bushel f.o.b. southern ports for Tuscan and similar varieties, 5s. 9d. per bushel f.o.b. southern ports for Hunters and similar varieties, 6s. 3d. per bushel f.o.b. southern ports for Pearl and similar varieties. These prices are with increments at the same rate as this year's. The price of flour has been fixed at £21 per ton f.o.b. at southern ports, bran at £6, and pollard at £9. The millers are to receive a subsidy of £1 10s. per ton on flour (a reduction on last year's subsidy).

The prices as fixed have been accepted with very little complaint, and the wheat crop is likely to produce sufficient for the year's requirements.

Live Stock Prices.

With practically nothing being done for export prices of all classes of stock are at a low level throughout the North Island. At recent sales at Gisborne 2-tooth wethers brought 16s., 4 and 6 tooth ewes 20s. 4d., five-year-old ewes 15s., lambs 6s. 3d. Store cattle are not wanted. In Taranaki, lambs made 5s. to 8s. 6d., young mixed ewes to 14s. 6d., sound mouths 6s., in-calf heifers £3 3s., store cows from £1. In the Wairarapa, 2-tooth wethers brought 7s. 6d. to 10s., lambs 3s. to 6s. 6d., two-year-old steers £2 5s., yearlings £1, three-year-olds £4. In Hawkes Bay, 2-tooth wethers brought 10s. to 13s., forward lambs 12s., young ewes 7s.

to 17s., old ewes from 4s., dairy heifers £8 8s., cows £10, medium two and three year old steers £2 10s. to £3 10s.

The Price of Meat.

The fall in the value of stock has resulted in the butchers' retail prices being lowered in all the centres, and auction sales of meat are also taking place where sides and quarters can be obtained at very low rates. The following are the quotations, cash over the counter, of the largest retail butchery in Wellington:—Beef: Fillet, per lb., 1s.; rump steak, 10d.; whole rump, 7d.; sirloin beef, 7½d.; prime ribs, 6½d.; rolled beef, 6d.; steak beef in piece, 6d.; gravy beef, 5d.; beef steak, 7d.; fresh brisket on bone, 4d.; corned beef on bone, 4d.; corned round, 7d.; corned roll, 5½d.; shins, 2d.; legs, clods, and neck beef on bone, 3d. Mutton: Sides, 5d.; hindquarter with flap, 5½d.; leg, 5½d.; loin, 6½d.; best neck, 5½d.; forequarter, 4½d.; shoulder, 5d.; neck, 4d.; neck and breast, 3½d.; flaps, 3d.; chops, 6½d.; cutlets, 10d. Veal: Fillet, per lb., 8d.; shoulder, 6d.; loin, 6d.; forequarter, 4½d.; cutlets, 10d. For delivery another ½d. per lb. is being charged. No change in the price of pork is yet announced.

CANTERBURY AND MARLBOROUGH.

The weather during the month has been broken, there having been a good many showers, but an absence of sufficient rain to promote a good autumn growth. During the past fortnight the temperature fell considerably as the result of southerly winds, accompanied by short falls of rain on the plains and light snow on the tops of the ranges. North-west winds have also been prevalent, with heavy rains on the main ranges, these winds generally alternating with those from the south. The cold showers of rain have done some good in checking the aphid blight showing on the rape and turnips.

If there is not a fair growth of grass during the next month feed is likely to be scarce during the winter, as there will be an unusually large number of sheep to carry forward. The wheat harvest has turned out well, and the fixed Government prices are profitable, but oats are at a very low figure. A considerable area of stubble land has been sown in green feed for winter and spring feeding of sheep.

Halfbred Rams.

Although first cross sheep (Longwool-Merino) do not get the same amount of advertising as the inbreds (Corriedales), yet they are quite as popular, though their numbers will be difficult to keep up, owing to the decrease of the Merino. The breeding of halfbred rams, which are almost entirely for holders of hill country, is carried on by a number of North Canterbury and Marlborough breeders, and their sheep are seldom seen at the ram fairs, but are sold privately. A leading North Canterbury pastoralist has sold this year 600 flock halfbred rams at £8 8s. each.

Champion Show.

At the annual meeting of the Canterbury A. & P. Association, Mr. R. E. Alexander referred to the regulations issued by the Board of Agriculture with reference to the proposed champion, or Royal, shows. The principal provisions were that such shows should be held only by associations with a membership of over 1200, which gave at least £1000 in prizes. Mr. Alexander pointed out that the provision regarding membership cut out the Canterbury A. and P. Association. He submitted that these were not the factors which should determine the matter, but that facilities for showing stock, railway and other facilities, and accommodation for the general public were of greater importance. He moved: "That this association protest against the methods proposed by the Board of Agriculture in allocating the centres at which champion shows shall be held." The motion was agreed to, and it was further resolved to urge the Board of Agriculture to arrange for the holding of champion shows alternately in the North and South Islands as soon as possible.

Live Stock Prices.

There is a slight improvement in the store sheep markets, as there is beginning to be a feeling that prices have about reached bed rock. The inquiry is chiefly confined at present to young breeding ewes, aged ewes being at a serious discount. Farmers want to get their ewes out to the ram in April, and therefore cannot longer delay in filling their requirements. Good 2-tooth

ewes are making 20s. to 28s. 6d.; ordinary sorts, 14s. to 18s. 6d.; good 4, 6, and 8 tooth ewes, 18s. 6d. to 24s. 6d.; medium sorts, 12s. to 18s.; aged ewes, 4s. to 12s.; 2-tooth wethers, to 13s. 6d.; forward 4 and 6 tooth wethers, 12s. 6d. to 16s.; medium sorts, 10s. to 12s.; forward lambs, 10s. 8d. to 12s.; medium lambs, 7s. to 10s.; inferior lambs, 3s. 6d. to 6s. 6d.; prime fat wethers, 22s. 6d. to 30s.; medium, 18s. to 22s., equal to 3½d. to 4¼d. per lb.; prime ewes, 19s. to 23s. 6d.; medium, 14s. 6d. to 18s. 6d.; prime lambs, 20s. 6d. to 25s. 6d.; medium, 17s. to 20s., equal to 6d. per lb.; prime bullocks, £16 10s. to £20 10s.; medium, £12 15s. to £16 5s.; prime heifers, £8 10s. to £13 12s. 6d.; prime cows, £7 5s. to £9 10s.; bacon pigs, 7d. per lb.; porkers, 9½d. per lb.

OTAGO AND SOUTHLAND.

The dry weather that has prevailed in the southern part of the Dominion during the autumn has been broken by some good rains, and it is hoped that they will check the falling prices of store stock. The feed outlook has not been at all promising, although there is a fair turnip crop, and there has been no northern demand for sheep. In the North Otago district the grain crops have turned out well, and high yields of wheat have been recorded. In the later districts the threshings have not yet far enough advanced to say how the yields will turn out. The later killing season in the south caused most farmers to miss the high prices that ruled for fat lambs in January and February, and the low prices realised for wool, and then the slump in sheep values has meant a very bad time for sheepowners. On the other hand the dairy farmers have done well.

Live Stock Prices.

At the Burnside market, Dunedin, prices show a little improvement. Prime bullocks sold last week at £16 10s. to £20; medium, £9 10s. to £16; prime cows and heifers, £11 to £13; medium, £7 10s. to £9 2s. 6d.; prime wethers, 19s. to 26s.; medium, 15s. 6d. to 18s. 6d., equal to 3¾d. per lb.; prime ewes, 15s. to 22s. 6d.; medium, 10s. to 14s. 6d., equal to 2¼d. per lb.; prime lambs, 22s. to 25s. 6d.; medium, 17s. to 21s. 6d., equal to 6¼d. per lb. for prime. In North Otago good sound mouth ewes have been selling at 7s. 6d. to 10s. 6d.; 6 and 8-tooth ewes, 10s. to 12s.; aged ewes, 2s. to 4s.; 2-tooth wethers, 11s. 6d. to 13s.; 4-tooths, 12s. 6d. to 15s. 6d.; good lambs, 8s. 6d. to 9s. 6d. In Central Otago 2-tooth hill wethers have been realising 7s., crossbred wethers 6s. 6d. to 8s. 1d., 2, 4 and 6 tooth ewes 8s. to 9s., old ewes, 1s. to 2s., crossbred wethers 10s. to 15s., rape lambs to 14s., Corriedale lambs 8s. to 8s. 4d., hill lambs 5s. to 7s., crossbred mixed sexes 4s. 2d. to 10s.

In *Chancery*, by John Galsworthy. (London: Wm. Heinemann; price, 9s. net.) Readers of Mr. Galsworthy's "Man of Property" will welcome the publication of this sequel. Old Jolyon Forsyte is dead, but James, Timothy, Hester, and Juley live on. "Young" Jolyon, rich and successful as a painter, Winifred and her rascally husband Dartie, and Soames Forsyte are a new generation of Forsytes who, with their modern individualism, succeed in breaking up the old order of Forsytes, the embodiment of that possessive instinct that built up the prosperity of the last generation.

Rainfall Returns.

EXPLANATION.

In the first column will be found the average yearly (district) rainfall, in the second the total fall to date, in the third the mean fall for the month, the fourth is the average rainfall for the next month based on the return of rainfall ever since records were taken, and in the fifth the condition of the pastures—E, excellent; G, good; F, fair; I, indifferent; B, bad.

WESTERN AUSTRALIA.

No.	Division.	Average Yearly Rainfall.	Total from 1st Jan. to 31st Mar.	Total Fall for Mar.	Average Rainfall, April.	Pastures
		Inches.	Points.	Points.	Points.	
1	North Kimberley	27.04	2,024	402	101	G
2	East Kimberley	25.70	1,940	856	104	G
3	West Kimberley	23.26	1,612	765	120	G
4	De Grey	13.59	967	366	136	G
5	Fortescue	9.44	1,315	311	93	G
6	West Gascoyne	9.11	649	111	42	G
7	East Gascoyne	9.39	147	38	76	I
8	S.W. North Coastal	17.85	194	90	69	F
9	S.W. South Coastal	36.26	283	98	177	F
10	S.W. Central	17.66	166	33	114	I
11	Kucia	14.35	62	19	103	F
12	South-eastern	9.95	87	13	97	F
13	North-eastern	10.23	14	—	177	F

SOUTH AUSTRALIA AND NORTHERN TERRITORY.

No.	Division.	Average Yearly Rainfall.	Total from 1st Jan. to 31st Mar.	Total Fall for Mar.	Average Rainfall, April.	Pastures.
		Inches.	Points.	Points.	Points.	
14	Northern Rivers	44.70	3,544	1,391	206	F
15	Northern Plateau	12.39	1,306	399	69	F
16	North-west	8.45	308	230	50	G
17	Far North	7.18	373	162	43	G
18	West of Spencer's Gulf ..	13.17	471	135	82	F
19	Upper North	13.30	1,082	541	91	G
20	North-east	8.48	834	376	56	G
21	Lower North	17.53	630	214	139	G
22	West-central	17.07	434	195	113	G
23	East-central	23.71	492	208	193	G
24	Murray Valley	13.08	549	228	96	F
25	Upper South-east	16.61	455	189	111	G
26	Lower South-east	25.51	267	84	197	G

QUEENSLAND.

37	Peninsula North	57.76	4,082	1,078	562	E
38	Peninsula South	39.67	3,171	1,111	222	E
39	Lower Carpentaria	23.20	1,715	799	109	E
40	Upper Carpentaria	26.02	1,308	542	139	E
41	Barron	63.85	5,420	2,628	747	E
42	Herbert	76.84	4,122	2,640	931	E
43	East-central Coast	46.96	2,188	980	303	G
44	West-central Coast	24.17	1,602	363	152	G
45	Central Highlands	25.16	1,049	346	158	G
46	Central Lowlands	19.59	775	441	135	G
47	Upper Western	15.20	850	340	61	G
48	Lower Western	11.98	680	341	69	G
49	Port Curtis	37.18	1,204	380	237	F
50	Moreton	49.49	1,591	803	399	F
51	East Darling Downs	23.30	533	244	160	F
52	West Darling Downs	23.84	492	225	141	F
53	Maranoa	23.67	475	313	135	G
54	Warrego	17.76	713	403	121	G
55	South Far-west	13.08	693	469	84	F

NEW SOUTH WALES

46	Trans-Darling North	9.11	320	160	57	G
47	Trans-Darling South	9.90	538	204	70	G
48	Cis-Darling North	13.71	539	245	94	G
49	Cis-Darling South	12.44	364	145	83	G
50	Upper Bogan	17.55	440	208	141	G
51	Lower Macquarie	17.83	537	235	159	G
52	Western Gwydir	20.02	565	337	122	G
53	Eastern Gwydir	23.45	439	294	151	G
54	Nandewar	23.40	611	339	180	G
55	Liverpool Plains	26.95	625	417	171	G
56	West New England	31.27	765	361	183	G
57	East New England	36.72	1,040	349	262	G
58	Clarence	53.62	1,945	740	495	G
59	Orara	54.30	3,118	682	525	G
60	Manning	49.38	1,860	414	453	G
61	Hunter	35.01	1,988	472	290	G
62	Cudgegong	25.53	614	335	183	G
63	Central Plateau	34.67	970	402	251	G
64	Warumbungles Highlands ..	27.26	792	465	199	G
65	Lowlands	21.92	485	226	166	G
66	Sydney	48.19	720	312	546	G
67	Nepean	31.75	970	437	269	G
68	Illawarra	39.92	876	294	304	G
69	South Coast	35.97	967	209	294	G
70	Upper Murrumbidgee	25.18	804	223	168	G
71	Snowy Mountains	40.70	709	193	225	G
72	Jugiong	30.26	580	227	202	G
73	Tumut	21.57	388	150	153	G
74	East Riverina	16.46	475	148	116	G
75	West Riverina	13.71	318	139	83	G

VICTORIA.

76	Mallee North	12.57	584	192	70	G
77	Mallee South	13.73	442	180	90	G
78	North Wimmera	16.26	365	152	108	G
79	South Wimmera	19.58	412	116	146	F
80	Lower North Country	16.93	515	206	110	G
81	Upper North Country	19.64	557	212	146	G
82	Lower North-east	23.48	660	179	173	G
83	Upper North-east	42.50	764	268	247	G
84	East Gippsland	30.29	600	120	225	G
85	West Gippsland	35.12	541	192	278	G
86	East-central	33.69	663	199	273	G
87	West-central	24.08	559	127	179	F
88	North central	26.11	647	217	175	G
89	Volcanic Plains	23.88	452	92	132	F
90	Western Coast	29.86	348	125	229	F

TASMANIA.

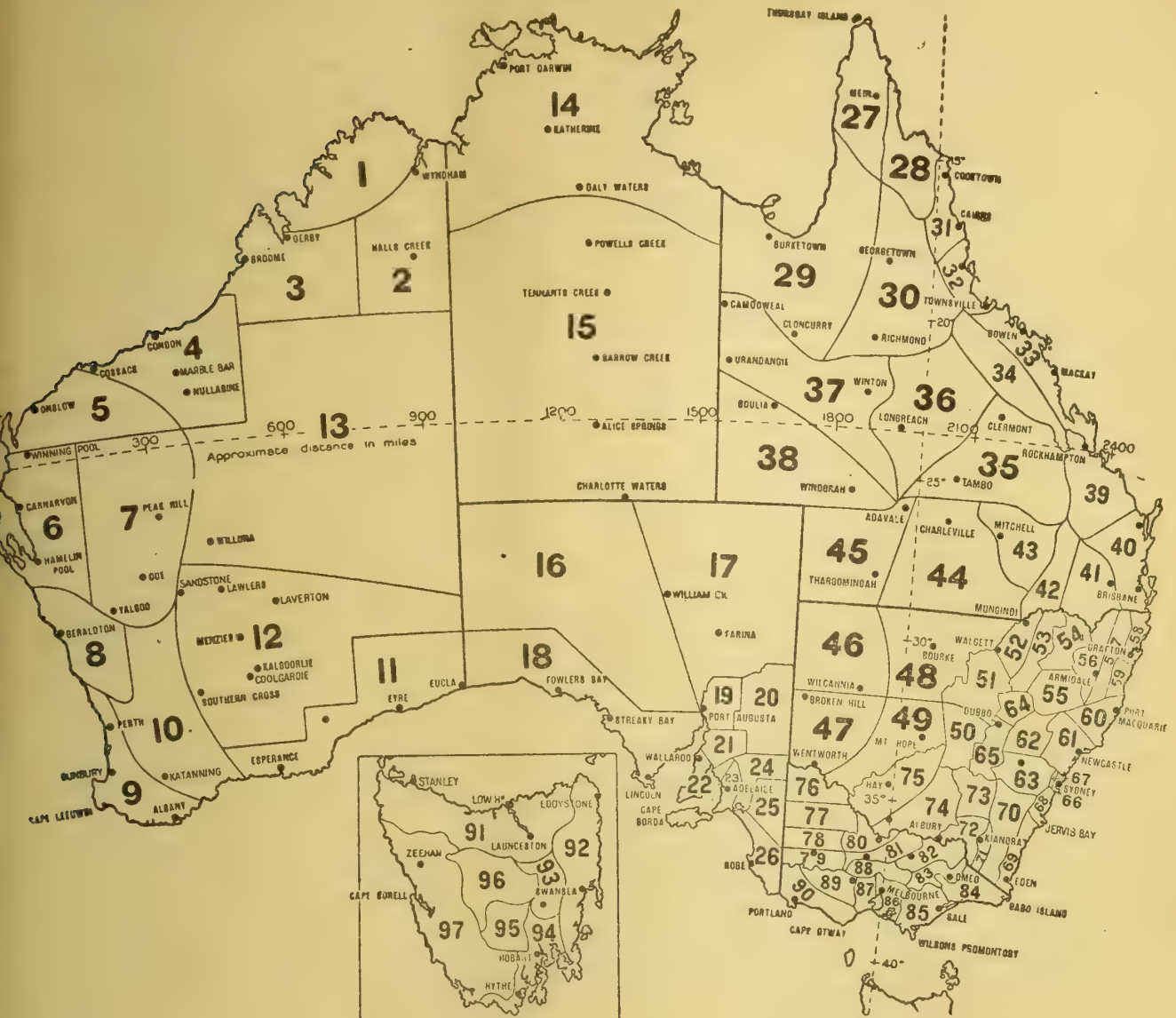
91	Northern	41.15	441	69	204	F
92	East Coast	32.26	377	71	253	F
93	Midland	21.63	379	58	204	F
94	South-eastern	27.98	496	141	266	F
95	Derwent	25.51	320	128	238	F
96	Central Plateau	31.17	454	140	249	F
97	West Coast	86.12	1,120	471	770	F
98	King Island	37.17	—	—	252	F
99	Flinders Island	27.69	—	—	285	F

N.B.—100 points = 1 inch.

H. A. HUNT, Commonwealth Meteorologist.

Australian Rainfall Map.

N.B.—100 points = 1 inch.



Seasonal.

The prospects for the winter are, generally speaking, good throughout Australia. New South Wales has had widespread and heavy falls within the last week or two, and feed should now be assured for some months ahead. The northern districts of Victoria have also experienced useful rains, but the southern half, particularly the western portions, has not been so fortunate, and although pastures are still fairly good heavy soaking falls are required to secure winter feed and enable wheat growers to get on with their cultivation and sowing. Practically the whole of Queensland has benefited at different times during the month from one or other of several wet visitations, and prospects in that State are satisfactory as far as the winter season is concerned. As the result of an exceptionally dry March in Tasmania, feed has dried up very much, though there is still a fair picking for stock, which are holding their condition well. If a good rain comes shortly the grass should go right away and make good growth before the cold weather arrives, and stock conse-

quently would be right for the winter. South Australia has had good rains again, especially in the north; the country is in good heart, and conditions generally are reported to be satisfactory for stockowners and producers of all classes. More rain would not be amiss, however, in the south-east of the State. In Western Australia, conditions in the agricultural areas are somewhat dry, and rain would be very welcome. In the north-west, however, the Kimberleys, the De Grey, the Fortescue, and West Gascoyne have been blessed with plentiful rains, and prospects are good, but the Upper Murchison country is in bad order, there having been no good rains for two seasons. In the North Island of New Zealand most of the country has had a dry spell—although there have been some useful falls in the Wellington Province—and feed, particularly in Hawkes Bay, has become very dried up and short. In the South Island there has been broken weather, with occasional rain, but unless there is a better growth of grass during the next month, feed is likely to be scarce during the winter, as there will be an unusually large number of sheep to carry forward.

Tasmania.

LAUNCESTON, 6th April, 1921.

The exceptionally dry month of March has had a bad effect on the country. The rainfall was very short all over the State, being 50 per cent. below normal in the Derwent Valley, 65 per cent. in the midlands, 74 per cent. in the north and north-west, and 85 per cent. in the east. This week there was a good fall in the north-east and east, up to 1½ inches being recorded, but it was very light in the north and north-west, and only a few points in the midlands and south, and a thorough soaking downpour is badly needed in these sections. It is also an urgent want in the main agricultural areas, and unless it comes soon cultivation will be much delayed, as the ground is very hard. As usual a large area has already been sown with Algerians for early feed, as this is the means most extensively adopted in Tasmania for providing a green bite and in fattening off sheep. As the usual March rains did not arrive some of the paddocks have little more than germinated, and a fair area may have to be resown.

Feed has dried up very much, but still there is fair picking for stock, which are holding their condition well. If a good rain comes shortly stock should be right for the winter, as when the grass gets a good shoot it should go right away and make good headway before the cold weather arrives.

Stock.

There is plenty of fat stock in Tasmania just now, and prices are at a lower level than they have been for a long time. Beef is down to about 6d. per lb. on the hoof, and a good deal of inferior quality is finding its way to the market. The destination of the King and Flinders Island cattle has a marked effect on the Tasmanian market, and as a large proportion is likely to find its way here for some time, instead of going to Victoria, it is improbable that there will be much rise in price. The market is over supplied with sheep and lambs, and they promise to be more plentiful during the coming winter than for some years. The market for stores is quiet.

Wool Sales.

Various estimates have been made of the loss sustained by Tasmanian sheepowners by the postponement of the wool sales, owing to the shipping strike, and the president of the Farmers and Stockowners' Association (Mr. L. M. Shoo-bridge) puts the figures at £150,000. He predicts a bad time for the producers of crossbred wool, as so many who raise this class of wool in this State will not be able to hold on to their clip. One relief to growers is that a large quantity of the Tasmanian clip had been bought privately before the sales were held. Nearly 20 per cent. of the clip was disposed of in this way, and it included some of the best wools grown in the State. A feature of the sale was the record price of 35d. paid for Tasmanian Merino. This was for 19 bales of first combing, grown by Mr. A. B. Thirkell.

The Shearers' Claim.

In view of the slump in wool values, pastoralists were looking forward to some relief from the high shearing rates rather than a claim for still higher pay. The new rates demanded are regarded as beyond the scope of reasonable discussion, and the view is taken that the industry can hardly meet the existing schedule, now wool has fallen in price, let alone an increase.

Only Registered Sheep.

The Australian Corriedale Breeders' Association has taken a stand in regard to the showing of unregistered sheep in this State. The committee of the Campbell Town show was informed that members of the association would not show sheep if unregistered animals were allowed to compete. The committee agreed to the association's proposal.

The Wheat Crop.

The yield of Tasmanian wheat during the past season is estimated at 500,000 bushels, and with the view to facilitating its disposal the Wheat Board and the millers have agreed that a greater proportion of Tasmanian wheat is to be mixed with the mainland product for gristing.

Argentina.

(FROM OUR OWN CORRESPONDENT.)

BUENOS AIRES, 1st February, 1921.

Heavy rains fell last month over a very large area of the Republic, the whole of the Buenos Aires province southern and northern Santa Fe, Cordoba, Tucuman, Santiago Corrientes, Entre Rios, and Salta. Useful showers have fallen over the rest of the country. Taken all round the country remains in a good condition, and pasture is plentiful.

Financing Wool.

It is stated that a number of important wool exporting firms are negotiating with certain banks with the object of arriving at an arrangement for financing exports of wool in combination with textile manufacturers in other countries, who are said to have informed their representatives in this Republic that they are in a situation to utilise vast quantities of Argentine wool. It is stated that the basis of the negotiation referred to consists in the granting of banking credits here in small part payment to the exporters of the wool in order to enable them to meet the expenses of its transport. Once the wool has been converted into cloth it would be sent back to this country for sale at prices representing a moderate profit, which would be divided between the sellers of the raw material and the manufacturers.

The Government has promulgated a law exempting from the export duty for a period of one year all wool and leather.

Exports.

The "Review of the River Plate" publishes a table showing the quantities and destinations of principal exports from Argentina to overseas ports covering the year 1920. It will be seen that wheat exports at 5,029,958 tons are greatly in excess of the figures of each of the previous four years, and that they compare with 3,258,259 tons in 1919. Maize shipments during the year just ended amounted to 4,387,736 tons, as against 2,374,721 in 1919. Linseed shipments last year at 1,014,840 tons were exceptionally high. The figure for 1919 was 840,272 tons. Shipments of oats also were on a larger scale than in the previous year (410,537 tons, against 331,350). On the other hand, the exportation of flour at 172,971 tons showed a decline in comparison with the previous year, for which the figure was 276,269. Wool exports likewise marked an important decline at 232,691 bales, as against 349,200 in 1919.

Taken altogether the volume of meat shipped from Argentina during 1920 was practically the same as that exported during 1919. The falling off in frozen beef was more than compensated by shipments of chilled beef, and that in frozen mutton by increased export of frozen lamb. The figures for 1920 were:—Frozen beef quarters, 4,549,676; chilled beef quarters, 629,213; frozen mutton carcasses, 1,193,863; frozen lamb carcasses, 562,854. The corresponding figures for the previous year were respectively:—5,033,596, 74,598, 1,425,845, 218,332. Meat exports have been very heavy during the opening days of the current year—swelled by two very large shipments from an up-river port.

Argentine Live Stock Census.

The latest figures regarding our live stock are as follows:—Beef cattle, 27,392,126 head; sheep, 45,309,419; goats, 4,670,130; swine, 3,227,346. Comparing these figures with those of the 1914 census, the following increases are indicated:—Beef cattle, 1,525,363; sheep, 2,083,967; goats, 341,133; swine, 326,961. The proportion of pedigree bovine animals is reckoned at 6 per cent. of the whole.

Outbreak in the South.

For some weeks the population of Santa Cruz province has been literally held up by armed mobs, and a vast amount of damage has been done. So bad has the condition of things become that a number of leading commercial firms operating in or near the township of Rio Gallegos, in the territory of Santa Cruz, have telegraphed to the Minister of the Interior to the following effect:—

Last night the petroleum tank steamer "Aristobulo del Valle" arrived at this port (Rio Gallegos) and disembarked 42 soldiers a force inadequate to safeguard the tranquillity of this town.

ship, and still more so the valuable interests of the rural population. Yesterday groups of men styling themselves strikers set fire to and burnt the estancias Canadon, Alquinta, and Las Buitreras, besides attacking that of Paso del Medio. They carried away with them all the horses, arms, and ammunition, taking the employees prisoners, and leaving the estancias entirely abandoned. These assaults were carried out simultaneously by bands of from eighty to one hundred individuals, perfectly organised, armed and equipped. All the establishments named are barely fifteen leagues distance from this capital, and no aid whatever was forthcoming owing to the local authorities not having forces to cope with the emergency. It is probable that the strikers, emboldened by these successes, will attempt to repeat their exploits here. These strikers have in the meantime gone on to other establishments to continue their work of destruction, encouraged by the immunity they enjoy. Being convinced that only by Your Lordship using our good offices with the President of the Republic will it be possible to restore order in this region, the undersigned property-owners consider it their duty to indicate to Your Lordship the necessity of sending a regiment of cavalry here without delay, as that is the only means of suppressing this rising against law and order of over 2000 individuals.

A nice state of things indeed, and for a country which prides itself on good government and discipline, not one to be proud of. Of course there is only one thing to do, and that is to send sufficient forces down to the district to bring an end to the anarchy, and to deport a number of the ringleaders to a picked island down south. The Chilean Government is making no chances. At the border and all crossing places she has machine guns and ample soldiers to prevent the criminals escaping into her territory.

Live Stock Markets.

Sheep.—Wethers, special £1 6s. 3d. to £1 9s. 9d., good 19s. 3d. to £1 2s. 9d.; ewes, special £1 2s. 9d. to £1 8s., good 19s. 3d. to £1 2s. 9d. Cattle.—Bullocks, special £17 10s. to £19 5s., good, £14 17s. 6d. to £16 12s. 6d.; cows, special £16 12s. 6d. to £18 7s. 6d., good £13 2s. 6d. to £15 15s.

United Kingdom.

LONDON, 3rd March, 1921.

February has been the driest met with for nine years past, and agriculture has fared accordingly. The open weather has enabled ploughing operations to proceed uninterruptedly, and farm work is generally well forward. In the earlier part of the winter several districts suffered from excess of moisture. That condition being succeeded by the present spell of open weather, the land has been deprived of the beneficial effects of hard frost. All classes of stock are doing well, and hill sheep are in excellent condition. In England ewes are healthy and in good condition, though in certain districts they have suffered from the wet, and in many of the low-lying parts of Wales, as well as in a few English counties in the west, fluke is prevalent. The fall of lambs among the early flocks in the south of England has been very satisfactory, and as the ewes have plenty of milk the young lambs are strong and doing well. Winter keep has not been drawn on largely, and supplies are plentiful throughout Great Britain.

The new statistics issued by the Ministry of Agriculture show striking changes in the farming conditions of England and Wales. A remarkable feature of the return in 1920 was the decline as compared with 1919 in the area under arable cultivation, amounting to 289,000 acres. This was accompanied by a small increase of 48,000 acres in permanent pasture, giving a net decline in what is usually regarded as the cultivated area of 241,000 acres. This loss has followed on a similar loss in the preceding year, with the result that, in the two years 1919 and 1920, the total area under crops and grass has been reduced by 30,000 acres. As regards permanent pasture, there has been a very substantial fall in the area of this class of agricultural land, amounting to over 1,500,000 acres since 1916, the total having fallen from 16,020,000 acres in that year to 14,487,000 acres in 1920. The bulk of this area has, of course, been ploughed up, and now appears under the heading of arable land. In 1920 there was a small increase of 48,000 acres in permanent pasture, but it cannot be said that at present there is any marked indication in these figures of a movement on the part of farmers to put increased areas under permanent pasture. If the land returned under the three headings of arable, permanent pasture, and rough grazings be added together it will be found that the gross area has declined from 30,896,000 acres in 1914 to 30,669,000 acres in 1920—a loss of 227,000 acres.

On the Wallaby.

Motor Trip to Central Australia.

(Continued.)

PART IV.

The Police Station at Alice Well is the furthest south in the Territory, and the duties of the lone officer in charge extend 100 miles south to the border, 50 north, half-way to Alice Springs, and east and west from the Queensland to the W.A. border, some 500 miles, or cover roughly an area of 75,000 square miles. Constable Sherman is a very live wire (as he needs to be), tall, clean built, wiry and alert, and looks just the man for the job, for he has to practically live in the saddle. One wonders what some of our southern officers would think of having to police, single-handed, a district practically the size of all Victoria, with the addition of a lot of half-savage blacks (myalls) on the western border thrown in.

Though the Police Station is the only house in fifty miles, Mr. and Mrs. Sherman (the latter a bright, little lady from Goulburn Valley, Vic.) seem wonderfully happy and contented in their isolated life. One big thing, they are connected by telephone with both Alice Springs and Charlotte Waters, and thus can keep in constant touch with the outside world. Adjoining the well they have an excellent vegetable garden, and like most settlements in The Centre, keep a big flock of goats for meat and milk.

Talking of goats, one of our party, who has always had an edge against goat mutton, declared several times during the trip that nothing would ever induce him to touch it, and we have to thank Mrs. Sherman's cleverness in the culinary art for giving him an object lesson as to the palatable relish of goat when properly and delicately prepared. She served us a curry equal to the best the leading chef of Bombay could turn out, full of raisins, currants, pigmy carrots, dried fish, and all sorts of other delicacies beyond our ken, and our friend of the declaration against goat accepted a second helping (in fact we all did) eagerly, for such a dish was a big and agreeable surprise under the circumstances, but later on, when we learned that the basis of the curry was goat mutton, we had the laugh against our friend.

A few miles south of Alice Well, and just north of Depot Well, we came on to Hayes Bros.' huge run, and passed through the old post and rail east to west fence, erected across the country by one of the big companies who took the country up some 50 years ago, and after a succession of dry seasons either threw the country up or sold out their herds, with the runs thrown in, at from 5s. to 10s. per head; but these happenings were when cattle values throughout Australia were at a very low ebb. The Hayes family came in then, and absorbing and consolidating gradually since several large runs adjoining, now have a holding from the northern boundary of Engoordina, or Horse Shoe Bend run on the south, of over 100 miles in a straight line to Alice Springs on the north, and from the Mission Station boundary on the west of some 120 miles to the eastern boundary of their Undeelia run on the east, approximating over 10,000 square miles in one block, truly "some run," and in good seasons nearly all fattening country.

After leaving Alice Well the Hugh River is crossed again twice in the first few miles, making in all ten crossings of the Hugh in some fourteen miles. Twenty miles from the Police Station Francis Well, a splendid supply on a creek, and where the big 20,000-gallon tank and travelling stock watering

troughs are kept filled by a horse whim, worked by the natives, is reached, the intervening country being more or less of a sandy nature, interspersed with loamy flats. An outstanding flat-topped hill of pure white kaolin, about 100 to 150 ft. in height, close to the track on the west side, is a prominent land mark some five miles south of Francis Well. One mile to the north of the latter is Messrs. Hayes Bros.' principal homestead, Mary Vale, the track passing between their two houses. They had driven a Dodge car up from Oodnadatta a few weeks previous to our visit, and by keeping out towards the valley of the Finke, after leaving Horse Shoe Bend, had got round the west end of the famous Depot Sand Hills, and thus managed that strenuous stage without the assistance of a team. We had heard of this, and were hoping to do the same, but after seeing the country, felt quite convinced that the advice we got, not to attempt it unless piloted by one of the Messrs. Hayes, was right. However, we heard that they intend, in their first spare time, to pick out and run a line that will be navigable for a car on her own power around the west of the sand hills, and feel sure, if it is at all possible, that these pioneer bushmen, who know practically every mile of that country, will do it.

Five and a-half miles beyond Mary Vale the speedometer registered 1000 miles north of Adelaide, including the 170 miles we had done by rail. Just hereabouts the first ranges of Central Australia come into view, some two to five miles to the west of the track. These are spurs or off-shoots from the James Ranges, the main backbone of which is situated forty miles further north, also on the west side of the track, and running parallel to and some 30 miles south of the MacDonnells from east to west for some 50 miles till it strikes the Finke, on the Mission Station block, opposite the big Kirchauff Range, on the west bank of that river.

These first ranges are mainly of a very dark red, rough sandstone, and very picturesque, their summits being in places saw-toothed, or deeply serrated. A few miles further on are several small creeks, with some well-grassed flats, showing among other grasses the most southern limit of the gulf grass, and in tussocks a long headed oat grass, something similar to kangaroo. These flats are nicely timbered with open clumps of coolabah box, bloodwood, and well-grown mulga, and so far was the best pastoral country we had seen.

At 24 miles from Mary Vale we struck the Deep Well, and stayed the night. We intended to go on about half-way to Alice Springs and camp out, but Mr. and Mrs. Johansen, who had quite recently built a very comfortable stone house at the well, insisted on our putting up with them, and were most hospitable. Mrs. Johansen's salads were an eye-opener, and when we found that the tomatoes were grown on vines in their second season, and found the Iceberg lettuce really true to name for the first time in our experience, every leaf snow white, thin as a wafer, and brittle as ice itself, we were more than ever convinced of the possibilities of the soil of The Centre, given sufficient water.

The Deep Well is the deepest well we struck, 250 ft., and the water, which is as fresh as rain itself, is as clear as gin. Mr. Johansen keeps the 20,000-gallon surface tank and long cattle troughs filled by a 12-ft. mill, and in the absence of wind raises the water with a small petrol engine. This well was the original homestead of the Hayes family, and there are some fine old sugar gums (far stockier and thicker in foliage than usual with that species) around the well, planted by old Mrs. Hayes. Mr. Johansen has a small block of about 500 square miles hereabouts, running up towards the Ooraminna Range, which some few miles to the north is on the east side of the track, and opposite the main James Range on the west.

At supper here we met Dr. Haworth, of Darwin, who had driven right through, and was on his way to Melbourne to interview the Minister in charge of the Territory, in connection with the leases of some country he had of late bought into, out on the north-east of the MacDonnells. The doctor, who was practising his profession of dentistry as he travelled, and who was an old Geelong College boy, had been pretty well all over the States, and had quite recently finished

another long overland trip from Derby, via Hall's Creek and the Victoria River, to Darwin. As he intended on the return trip to strike across country from Oodnadatta, past the north end of Lake Eyre, a risky job, as there is no track and no water, except in good seasons, and then across to the Georgina, and up that river to the Barclay tableland, by the time he gets back to Darwin he will know the Territory better than most Darwinians.

From Mary Vale to 35 miles north of Deep Well the going is through fairly heavy, sandy country, with a decided, though very gradual rise across steppes or plateaux all the way (though no sand hills), as in that 60 miles the country rises some 1500 to 2000 ft., the plains surrounding the MacDonnell Ranges and the valley in same being 2500 ft. above sea level.

Between Deep Well and the Ooraminna Range, which is a little under half-way to Alice Springs, the first mallee since leaving the plains north of Adelaide comes in, but only in small belts or patches. This species, which was new to all our party, runs from 15 to 20 ft. in height, and has leaves the shape of a red or apple leaf box, but much greener in colour. These small mallee belts continue intermittently till the Emily Plains, 15 miles south of Alice Springs, are met with. In between them the country continues to get more grassy. Here a strong silver or white top grass, one of the *Panicum* family, very similar to the "Blowaway" of the Liverpool Plains, but with the seed in closer clusters than that species, is noticed for the first time.

In one of these mallee clumps we saw the first rufous-breasted kingfisher, though in the vicinity of the MacDonnells and the Mission Station, on the Upper Finke, we saw many more. About the same place we saw and shot for identification a rare little *Xerophila*, with rufous back and a black band across a greyish white breast. This little chap, as he is only known in The Centre, and rare even there, was of course quite new to us, and we were lucky to get even one, as the Spencer and Gillen Expeditions considered him one of their prizes in the bird line.

The Ooraminna Range looms up from 18 to 20 miles north of Deep Well, only from 1 to 2 miles to the east of the track, and running out 30 miles to the east, 500 to 800 ft. above the plateau, worn by thousands of years of storms into all sorts of queer castellated shapes, and having the appearance of solid ironstone, though in reality consisting only of rough, dark red sandstone, very similar to its neighbour, the James Range on the west.

Another five miles and we got our first view of the famous MacDonnells, away to the north-west, stretching away in their long east and west line right across the country, and in the distance of a beautiful purple blue. As we got closer they stood up (Mt. Gillen predominating), broken, steep, and very rugged in their grandeur. Fifteen miles from their base we came on to the Emily Plains, beautiful level, open grazing country, well grassed, with a large variety of mixed grasses, with open belts and clumps of iron-tree (very similar to myall, only generally larger by 50 per cent., and more weeping), and good mulga, and big umbrella couch in tussocks thick along the water wash-outs. These plains are very similar in appearance to the Liverpool Plains, but have no black country and little herbage, the soil generally being of a chrome coloured, good and apparently rich loam.

Heavy Tree Gap, the gateway of the MacDonnell country from the south, with its great rock walls of many hundreds of feet sheer up on either side, was passed through at 2 p.m., exactly half-way by the telegraph line, on the long stretch of 178 miles separating Adelaide from Darwin.

Just inside the gap is a fine plain of old man saltbush, of some 1000 acres in extent, used largely by the camel teams for agistment, and heavily hammered by them in the late, long dry spell. Through the high saltbush, and we motor into the little township of Alice Springs (officially known as Stuart, after the famous explorer), on the banks of the Hugh, and surrounded by picturesque and solid old gums and big and very green looking peppers.

(To be continued.)



COWS AND CALVES ON HILLY COUNTRY.



STUD COWS IN THE HOMESTEAD PADDOCK.
THE HEREFORD STUD AT TOCAL, PATERSON, N.S.W.
The Property of the Estate of the late Frank Reynolds.



BLOOD MARES AND FOALS.



HEREFORD BULL, TWYFORD HERO (IMP.).

Champion at the Sydney Royal Show, 1921.

TOTAL, PATERSON, N.S.W., THE PROPERTY OF THE ESTATE OF THE LATE FRANK REYNOLDS.



CHAMPION HEREFORD BULL AT MASTERTON, GAY HELMSMAN.
Exhibited by Mr. Donald McKenzie.



CHAMPION HEREFORD COW AT MASTERTON, PARK AMETHYST 36TH.
Exhibited by Mr. G. F. Moore.



FIRST PRIZE YEARLING ABERDEEN ANGUS BULL AT DANNEVIRKE,
PHYSIQUE.
Exhibited by Mr. Frank Armstrong.



CHAMPION HEREFORD HEIFER AT DANNEVIRKE.
Exhibited by Mr. J. S. Nelson.

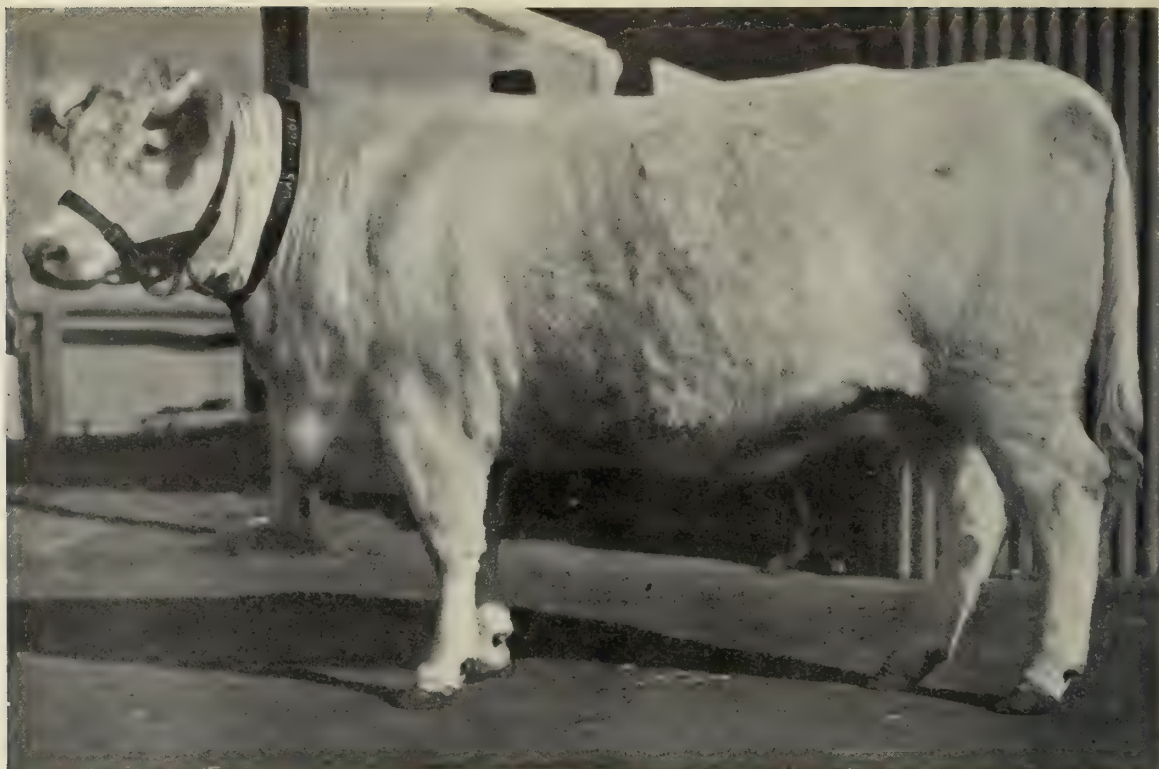


CHAMPION ROMNEY MARSH RAM AT MASTERTON.
Exhibited by Messrs. Wm. Perry & Son.



CHAMPION ROMNEY MARSH RAM AT DANNEVIRKE.
Exhibited by Mr. J. E. Hewitt.

SOME PRIZEWINNERS AT THE RECENT MASTERTON AND DANNEVIRKE SHOWS, N.Z.



CHAMPION SHORTHORN COW, MILTON'S GAINFORD DUCHESS.
Exhibited by Mr. Anthony Hordern, Milton Park, N.S.W.



CHAMPION HEREFORD COW, LAST DAY 325TH.
Exhibited by the Estate of the late Frank Reynolds, Tocol, N.S.W.
CHAMPIONS AT THE SYDNEY ROYAL SHOW, 1921.



RESERVE CHAMPION HEREFORD BULL, TWYFORD GEORGE.
Exhibited by Estate late Frank Reynolds, Tocal.



RESERVE CHAMPION SHORTHORN BULL, LINDENOW DUKE OF DERRIMUT 68TH.
Exhibited by Mr. Anthony Hordern, Milton Park.



RESERVE CHAMPION SHORTHORN COW, GRAND DUCHESS OF CLIFTON 2ND
Exhibited by Mr Harry L. Austin, Eli Eliwah.

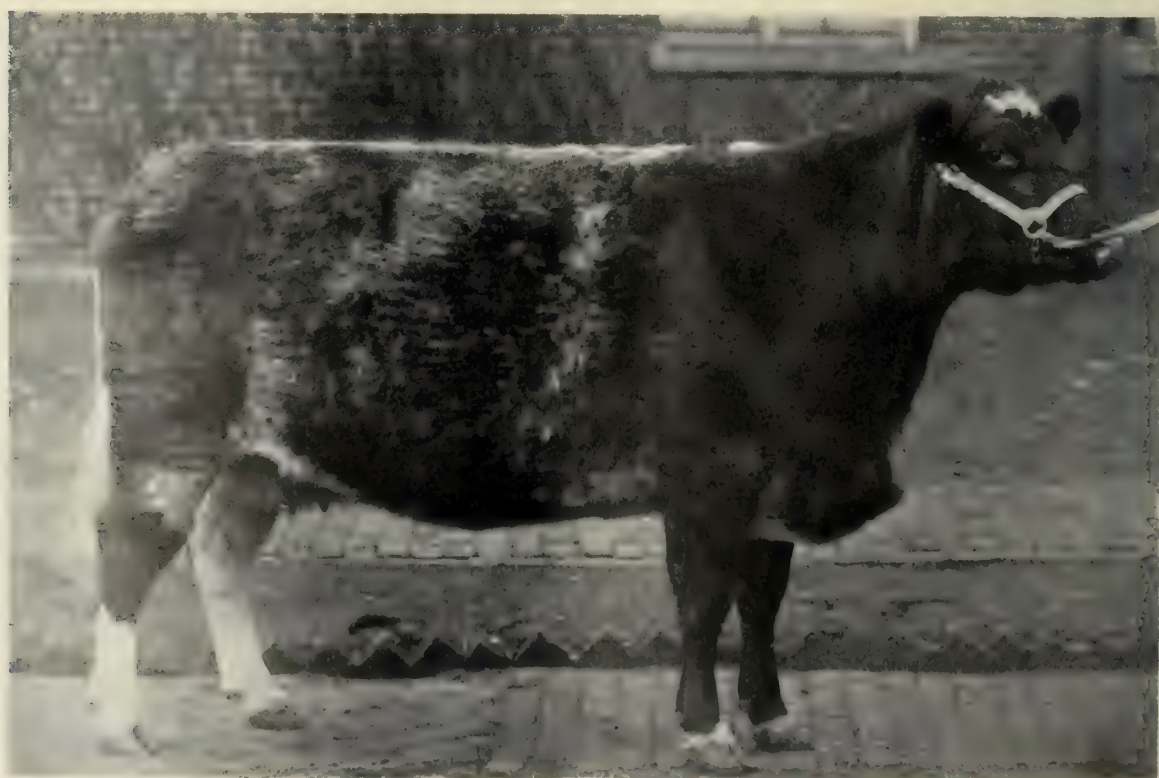


RESERVE CHAMPION HEREFORD HEIFER, MINNA LILY 5TH.
Exhibited by Mr. P. Reynolds, Hobartville.

SYDNEY ROYAL SHOW, 1921.



THREE MATRONS FROM THE POLLED SHORTHORN HERD OF MARVIN J. RANCK & SONS, ROANN, IND., U.S.A.
Exhibited at the Chicago International Live Stock Exposition, 1920.



POLLED SHORTHORN COW, ROAN BUTTERFLY, OWNED BY MARVIN J. RANCK & SONS.
Second Prizewinner at Chicago International, 1920. Dam of Royal Stamp, 1918 International Grand Champion Bull, and Glenwood Stamp, 1919 International Junior Champion bull, both of whom were exported to Uruguay.



FLYING BOAT.

W. Kimbell, Photo.



TAXI-ING ALONG THE SURFACE.

W. Kimbell, Photo.



W. Kimbell, Photo.

THE AUXILIARY SCHOONER, "ACIELLE," MOTHER SHIP TO THE FLOTILLA OF AIR CRAFT.

PART OF FLEET FOR SURVEYING EAST COAST OF AUSTRALIA.

Equipped by Mr. Lebbeus Hordern, of Sydney. The "Seagull" flying boat is piloted by "Gnome," of this paper. See letterpress following "Motor Notes."



MALTAGE.



WALLENSIS.

BLOOD Sires.

(See letterpress by "Fife and Drum.")

A Popular Western Australian.

The accompanying is a photo of Mr. A. G. Leeds, J.P., who recently resigned the Western Australian managership of Dalgety and Co. Limited, after being associated with that firm for over forty years.

Mr. Leeds was born at Norwich, England, in the fifties, and came to Australia in 1879. Almost immediately he joined the firm of Dalgety, Blackwood and Co., in Melbourne, and two years later was transferred to the Sydney office. In 1896 Western Australia became the scene of his activities in the capacity of assistant manager, and in 1904 he was appointed manager for that State. At the inception of the Fremantle Harbour Trust, he was appointed a Commissioner, which position he held for nine years, the latter half of which were spent as chairman.



Mr. A. G. LEEDS.

It is Mr. Leeds's intention to proceed to England to enjoy his well-earned leisure. His three sons are resident in the West, one being at Wandina Station (on the Murchison) and two at Abydos, near Port Hedland.

The high esteem in which Mr. Leeds is held was expressed at the functions held in his honour during the past few weeks. These included farewell dinners by various members of the Pastoralists' Association, of which he is a foundation member, and by the Fremantle business men, as well as the staff of Dalgety and Co. Limited and many other friends.

The Tocal Herefords.

A good herd of Herefords in well-grassed paddocks makes most picturesque and imposing photographs, hence the opportunity of obtaining the illustrations of the above celebrated stud on the preceding pages was eagerly availed of. In a recent trip right through Queensland it was noticeable how the Hereford, by its hardy constitution, adapted itself to any rough and trying conditions, and the Tocal cattle have created a high reputation both there and throughout New South Wales, Western Australia, and South Africa.

This reputation has taken years to establish, and the enterprise of importing frequently from England high class cattle has been responsible for building up this fine herd and keeping up also its present high standard. Since 1888, 33 years, Tocal-bred Herefords at the Sydney Royal Show have won the bull championship twenty times, and that for cows on twenty-five occasions.

Mr. Darcy Reynolds, who has managed Tocal for many years with both his brothers, Mr. Harry and Charlie Reynolds, continues the great work established by their grand-

father, and so ably carried out by their late father, Mr. Frank Reynolds. Mr. Darcy Reynolds no doubt inherits from his ancestors that intuitive knowledge of stock, being quick as lightning to discern the good points or otherwise in a beast. He is wonderful in grouping cattle or single animals to show them in proper pose. In the large groups shown in our illustration he spotted instantly a wrong position of a cow or calf, and had it remedied at once.

Tocal, being so convenient by rail, a large number of visitors interested in Herefords and blood stock constantly avail themselves of the opportunity of inspecting the above.

Even in the early days this was always a show place. Mr. Percy Reynolds delights in relating an incident that occurred when Sir George Dibbs was in power. Mr. Reynolds had recently purchased an old horse in Maitland to draw the water wheel, &c.; he was old and decrepit, so much so that he would not lead him home himself, but had him sent. The old horse used to poke around the yard and get into the loose boxes after the lucerne while the stallions were out. Sir George personally brought a large party of politicians from Sydney to Tocal expressly to see "Goldsbrough," (whose photo we publish in Sporting Notes this month), a household word in the sporting world of Australia in those days. After dining in the real hearty Tocal fashion an adjournment was made for the inspection. Mr. Percy was director of the party, and he says to this day he does not know what prompted him to do it, but seeing the old whim horse busy eating in one of the loose boxes, he threw open the door and said, "Goldsbrough, gentlemen." Sir George led the party into the box and delivered an oration for some half-hour on this wonderful horse, and what his blood had done for Australia, &c. This was seconded by many of the party, and when finished, Percy Reynolds calmly went to the next box and said, "The real Goldsbrough, gentlemen." None laughed so heartily or enjoyed the joke more than Sir George, who related it at the club for many years after.

Graziers' Co-operative Shearing Co. Ltd.

At a meeting of graziers held at Hay, N.S.W., last month, Major Clarence M. Spier, manager of the Graziers' Co-operative Shearing Company Limited, reported as to what the company had done to assist the woolgrowers during the two years it had been in existence.

The company started operations in March 1919, having been formed for the protection of its members and the graziers generally in the conduct of their shearing. In spite of the drought and influenza in its first year, it successfully conducted the shearing at forty sheds, totalling 702,530 sheep. In each case the grazier was given the cut out he asked for. Major Spier stated that a complete labour register had been established, and that during the first year's operations eighty good learners had been taught to shear. In its second year the company again met with difficulties in the shape of drought, floods, and strike. Still it was able to successfully conduct the shearing at 54 sheds, totalling 889,341 sheep. Twenty-five sheds, totalling close on 500,000 sheep, were put through under the graziers' policy of a 48-hour week. It increased its list of learners by teaching an additional 116 men to shear. The company has won the confidence of the men by organising good runs of sheds, with the minimum amount of travelling and lost time.

Major Spier stated that owners have been well satisfied with the manner in which their shearing has been carried out under the co-operative system. This is substantiated by the following resolutions that were passed at two large meetings of graziers, held at Uralla in January 1921, and Quirindi in February 1921:—(1) That the meeting had great confidence in the company; (2) that the New England and Quirindi districts would continue to support the company, and hoped that the rest of the State would do the same.

It is believed that if this company were supported by graziers generally, and given the opportunity of a large number of sheds, especially the early shearing sheds, it would be able to organise the shearing in such a way as to carry it out economically and efficiently.

Obituary.

James Robinson.

Mr. James Robinson, of Kimo, Gundagai, N.S.W., one of the most prominent pastoralists in the district, died last month at the age of 87. He was born at Fintona, County Tyrone, Ireland, and came to Australia with his parents,



THE LATE MR. JAMES ROBINSON.

arriving in Sydney, after a six months' voyage, in March 1839.

In 1841 his father purchased Coppabella Station, on the Upper Murray, from Mr. Henry Osborne, of Marshall Mount, Wollongong, N.S.W., and took his family to their new home, making the journey of about 350 miles by roads which were very rough, being unmade and without bridges. Mr. James Robinson was the only son, there also being seven sisters.

A comfortable home was made at Coppabella, and after the death of his father in 1868, Mr. James Robinson became the owner of the property, which he retained until 1872. Two years previously he had purchased Kimo from Mr. Granville Collins, the place being then quite unimproved; in fact, there was not more than £200 worth of improvements on the property. Immediately possession was given, however, the late Mr. Robinson set to work ringbarking and clearing, as well as fencing and putting up all necessary buildings. He was the first man to do ringbarking on the Murrumbidgee. Since then large sums of money have been spent on the place, and everything is now very up-to-date. Mr. Robinson always ran good stock, high-class Merinos and Romneys, Aberdeen-Angus and Ayrshire cattle at different times, as well as a stud of draught horses.

The late Mr. Robinson married in 1856 a daughter of Mr. John Brown, of Colstoun, Paterson River, N.S.W., and in 1890 a daughter of Mr. D. H. Evans, formerly of Wangaratta, Vic.

Frederick Holkham Dangar.

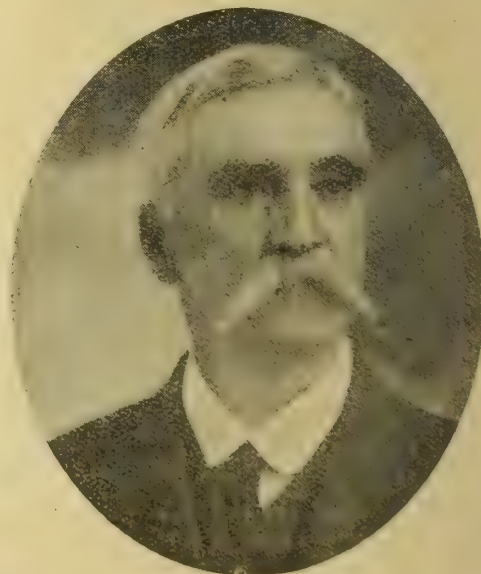
The cable announcement of the death of Mr. Frederick Holkham Dangar, at the age of 90 years, which occurred in London on the 26th ultimo, recalls the history of the well-known members of the pastoral family of Dangar Bros. The brothers were Messrs. W. J. Dangar, H. C. Dangar, F. H. Dangar, and A. A. Dangar, all of whom are now dead. Sons of the pioneer pastoralist, Mr. Henry Dangar,

who came to Australia about a hundred years ago, they became identified with the pastoral industry at an early age, and for some years worked together in partnership. Mr. Frederick Holkham Dangar, the subject of this notice, was born in New South Wales on 23rd October, 1831, and for some years was engaged in pastoral pursuits. At a comparatively early age he directed his attention to commercial matters, and to shipping, and in the course of a few years founded the firm of Dangar, Gedye and Co., merchants and shipping agents. Later on he bought the barque "Gladstone," 1100 tons, which traded between England and Australia. Disposing of her, he built the "Neotsfield," a fine vessel of 1820 tons, which became a well-known passenger and wool ship. Mr. Dangar took a very active part in the management of Dangar, Gedye and Co.'s business up to the year 1882, when he practically retired, and took up his residence in England. At this time he also disposed of his pastoral interests to his brothers, and sold his interest in the business of Dangar, Gedye and Co.

A fine, sympathetic, broadminded man, he was always ready to help others, and particularly those connected with the sea. His wife and one son predeceased him. One son, Mr. Dudley R. Dangar, and one daughter, Mrs. M. Hervey, survive him, and are now living in England.

M. E. Maher.

Mr. Mathew Edward Maher, who was general manager of Collaroy Station, Merriwa, N.S.W., for 34 years, died after a short illness in Sydney last month. He was educated at the Sydney Grammar School, from which he went to the Sydney University, where he took first-class honours in



THE LATE MR. M. E. MAHER.

mathematics, graduating B.A. in his 21st year. He took to pastoral pursuits at once after he left the University, gaining station experience at Burrabogie, Hay, N.S.W. He subsequently purchased Narromine Station, and after disposing of this to Messrs. Mack and Austin became general manager of the Collaroy Company Limited, in which he acquired a holding as shareholder. He was the first shire president of the Merriwa Shire, holding that office until a couple of years ago. Mrs. Maher, one son, and four daughters survive him.

News Jottings.

Foot and mouth disease continues to spread in Europe. One of the last countries to become infected is Sweden.

A **serious outbreak of rinderpest** is reported in Poland. It is believed that the disease was deliberately introduced from Russia.

The **aeroplane** recently enabled a buyer to travel out 100 miles from Longreach, Q., inspect 28,000 wethers, return and complete the deal all in the one day. Rather a different proposition to the horse and buggy.

The labour unions have returned to a certain amount of **peace in Canada**. The competition for employment is so serious in the building trades in Toronto that bricklayers are now laying 1000 bricks a day, where not long ago they were restricted to 450.

There is persistent talk of the Canadian Government handing over the **ownership of the national railways** to a private syndicate. The lines have recently been run at a serious loss, with heavier losses in view. It is estimated that the deficit by next year will amount to £25,000,000.

Mr. Donkin, of Meteor Downs, Springsure, Q., finds the **propane** very useful for station work, and especially of value in the inspection of the tanks, of which there are about 35 scattered over the large area of the run. The machine also proves invaluable for the quick location of sheep.

An estimate of the **sheep stocks in the United States of America**, issued by the Department of Agriculture, puts the number down at 45,067,000 head on 1st January 1921, compared with 47,114,000 head twelve months previously. The value this year is estimated at \$6.41, say £1 6s. 8d. a head, and in 1920 at \$10.52, or £2 3s. 10d.

After lengthy experiments in the laboratories of the Pennsylvania Department of Agriculture, it has been determined that the **exact nature of parasitic ailments** can be determined by a study of the sheep faeces. Heretofore it was necessary to take at least one animal from an infected flock and slaughter it before a proper diagnosis could be made.

The removal of the **embargo on the importation of Canadian cattle** into Great Britain is evidently still a live question. In the middle of last month Mr. Lloyd George promised a deputation that he would appoint a commission to investigate the matter. Further, he said that unless the Commission reported that there was a danger of disease the embargo would be withdrawn.

There is considerable difference in the **working expenses of railways** in Australia and South Africa. According to Sir William Hoy, Commissioner for the South African lines, despite the fact that African railways have a revenue of 5d. per train mile than Australian, their gross profit is 6d. more. He reckons that working costs in Africa are 11d. per mile cheaper than in Australia.

It is believed that the common **nettle tree of Brazil** (Ortiga) can be made to produce a fibre which will be a useful substitute for jute. A consular report from Sao Paulo says that a tree three years old will give from 6½ to 9 lbs. of fibre and can be easily and cheaply extracted, collected, and prepared for weaving. It is more resistant than jute, or even linen, and if worked by modern processes takes a finish superior to mercerised cotton.

Queensland stock at the Sydney Royal Show had an exciting experience when being returned to their homes on the "Buninyong." A heavy wave struck the vessel as she was passing through Sydney heads, with the result that the temporary stalls erected on the deck collapsed, and the animals stampeded. Things got so merry that the captain had to return to the wharf and unload all the stock. Fortunately none was seriously injured.

The committee on profiteering, which is investigating the **profit-making trade in England**, says that the average profit for 1912 was less than a halfpenny a pound. By 1919 the profit had risen to 9d., which was reduced to 6d. after deducting the excess profits tax. The percentage of net profits on the

capital employed increased from 15 per cent. in 1912 to 39 per cent. in 1919 after the deduction of excess profits. The committee adds that top-making is highly speculative.

A conference of veterinary officers from Kenya, Uganda, and Tanganyika Territories recently met in Nairobi to consider means of dealing with **pleuro-pneumonia and rinderpest**. Recommendations were made which involve an annual outlay of over £400,000 for three years, and which it is thought would save stock worth over £5,000,000. However it is not likely the scheme will be adopted in its entirety, although it is hoped that a good deal may be done with a lesser sum.

Professor Harvey Johnson, who has been abroad investigating **prickly pear problems**, returned last month after visiting North and South America. Laboratories are shortly to be established in Queensland and New South Wales, where insect and fungoid organisms that are being introduced into Australia will be thoroughly tested. It is hoped by this means to ultimately discover some parasite which will enable the different varieties of the pear to be got under control.

The U.S. Department of Agriculture is shortly to make the experiment of furnishing weather, crop, and market **reports to farmers by wireless telegraphy**. The first trials will be carried out near Washington, and if supported the service will be extended. The messages will be sent to central receiving stations in the country and distributed from there by hand or telephone, but it is expected that before long individual farmers will have their own automatic receiving apparatus.

A **hermit sheep** that had evaded capture for three years on the sea coast at Kaipara Harbour, N.Z., was captured a short time ago. The sheep, which was owned by Mr. H. Mather, of Glorit, was missing from the flock at shearing time three years ago. The flock was sold, and he refused to associate with the next lot, taking refuge among the mangroves when chased by dogs. During the next two seasons he was seen only at intervals, and evaded capture by clambering down a precipitous cliff to the coast. A few months ago Mr. Mather and his companions waited for a spring tide and went out with the dogs. The sheep ran for the mangroves, but was cut off by the tide. The dogs cornered him, but could not back him up the cliff, and were obliged to swim him for a mile. The sheep was of tremendous size, the live weight being over 200 lbs., and the wool, which was clean and free from tangle or brambles, was pronounced a perfect fleece, weighing about 35 lbs. In places it was 24 ins. in length, and unbroken.

United States Tariff.

A cable from New York last month stated that the Australian Trade Commissioner in the United States, Mr. Mark Sheldon, had said in an interview that there was every indication that a tariff on wool, meat, butter, wheat, and other farm and dairy products, with rates similar to the Fordney measure, which Dr. Wilson vetoed when President, would be passed at a special session of the Congress convened for 11th April. "I do not think," said Mr. Sheldon, "that the embargoes which are being discussed will be imposed, but the rates proposed are so high that they will be practically an embargo."

"The situation of the agriculturists is so bad that they are bringing the greatest pressure on the Government to protect them from all competition, in the hope that the prices for their produce will rise. I do not think that the new tariff will solve the producers' difficulties. Relief must come from the decreased cost of production, living expenses, and taxes. That process is very slow, since there is a disinclination on all sides to take less for goods and labour, but eventually it will occur."

Later advice hints at the introduction of a reciprocity clause. The bill vetoed by President Wilson provided for tariffs on wheat of 1s. 5½d. a bushel; on cattle of 30 per cent. ad valorem; on fresh or frozen beef, veal, mutton, lamb, or pork of 1d. a lb.; on wool (unwashed) of 7½d. a lb.; on wool (washed) of 1s. 3d. a lb.; and on wool (scoured) of 1s. 10½d. a lb.

Personal.

Mr. W. B. Slade, Warwick, Q., left last week in the "Mantua" to join his wife in Ceylon.

Mr. Harold Beauchamp has been re-elected chairman of directors of the Bank of New Zealand.

Mr. W. F. Perry, late owner of Tonianbar, died at Warren, N.S.W., early last month, aged 81 years.

Mr. G. H. Knibbs, C.M.G., Commonwealth Statistician, has been appointed Director of the Institute of Science and Industry.

Mr. E. E. D. White, of Bluff Downs, N.Q., has been elected president of the Northern and Central Graziers' Association of Queensland.

Mr. K. Kennedy, a pioneer grazier and an old resident of the Upper Hunter district, N.S.W., died at Upper Rouchel recently, aged 77.

Mr. J. Baynes, C.M.G., Nel's Rust, Maritzburg, Natal, South Africa, arrived in Australia last month on board the s.s. "Ascanius."

Mr. M. Corbett, Muccan Station, De Grey River, W.A., president of the Royal Agricultural Society, Claremont, Perth, called at our Sydney office last month.

Hon. A. H. Whittingham, M.L.C., of Alice Downs, Blackall, Q., has been elected president of the Graziers' Federal Council of Australia for the ensuing year.

Mr. Murray Clapham, sub-manager of the Australian Estates and Mortgage Company Limited, Melbourne, left for London on board the R.M.S. "Mantua" on 2nd April.

Mr. H. Lee, general manager of the London Central Meat Company, who has been on a visit to Australia and New Zealand, is returning to London by the "Omar."

Mr. Ritchie, son of Mr. R. B. Ritchie, of Blackwood, Penshurst, Victoria, was a member of the Cambridge University crew which defeated Oxford University last month.

Mr. Franc B. S. Falkiner, of Haddon Rig, Warren, N.S.W., who has been on a health trip to South Africa for a few months, returned to Australia a week or two ago.

By the death of **Mr. W. D. Powdrill, M.P.** for Hawera, N.Z., South Taranaki loses one of its most prominent men in the dairy industry. He was a director of a number of important companies.

Sir Arthur Goldfinch and **Sir John Higgins**, who are the chairmen and governing directors of the respective boards in Britain and Australia of the British Australian Wool Realisation Association, have been appointed at salaries of £10,000 a year.

Major H. Alan Currie, late of Mt. Elephant, and now living at Ercildoune Station, Burrumbete, Victoria, is distributing 500 butter factory shares among incoming soldier settlers on the Mt. Elephant subdivision. The shares have been paying a dividend of 5 per cent.

Mr. W. E. Cameron, Deputy Chief Government Geologist in Queensland, who was in charge of the operations at the Roma gas bore in connection with the efforts to remove the obstruction in the casing and to test for oil, has left for the Federated Malay States, where he has accepted an appointment.

Mr. H. E. Hays, late of Coonamble, N.S.W., is going to Bulawayo, Southern Rhodesia, to join Major Robt. Gordon, late of Queensland, but who has been resident in Africa since the Boer War, in stock, land, and general agency business. Mr. Hays' address will be Gordon and Co., Bulawayo, S. Rhodesia.

Mr. Robert Carlyle Hunter, of Ascot, Brisbane, died there on 28th March. He was born on Victoria Downs Station forty-one years ago, being the son of Mr. Robert Hunter, who owned the station at that time. He joined the Royal Bank, but three years ago left it to join the Australian Meat Export Company.

Mr. A. F. Hooper, manager of Goldsbrough, Mort and Co. Limited, has been elected chairman of the Melbourne Wool Brokers' Association for the ensuing year in place of Mr. R. J. Boyne, Melbourne manager of the Australian, Mercantile, Land and Finance Company Limited, who has held the position for the last two years.

Mr. William Cockrum, who died last month at Mt. Bryan, S.A., was one of the pioneer pastoralists of the State. He at one time owned Nillington and McCoy's Stations, and was also for a period in partnership with Mr. T. H. Pearse in The Gums Station. Born in Devonshire in 1839, he came to Australia in 1855, and has resided here ever since.

The following new subscribers to "The Pastoral Review" have been received during the month from countries other than Australasia:—Messrs. D. J. Doherty, London; E. G. Messner, Oregon; Wilson and Co., Chicago; F. W. Marshall, Perthshire, England; J. Hansen, Falkland Islands; S. Best, Bishop Wilton, England; Harries Hermanos, Punta Arenas; John Scott, San Julian, Argentina; R. Greenshields, Falkland Islands; British Association Magallanes, Punta Arenas; T. B. Saunders, Punta Arenas; Gordon and Co., Bulawayo; Chief Veterinary Officer, Ugan Africa.

Visitors to Melbourne Office.—From New South Wales: Messrs. J. Sloane, Mulwala; W. McCulloch, Balranald; R. H. Harroway, T. Guthrie Bowie, Sydney. From Queensland: Messrs. A. Walsh, Brisbane; David Green, Townsville. From Victoria: Messrs. H. L. Baillien, Torrumbarry; J. A. Cochran, Ceres; McCulloch, North Woodlands; H. W. Ham, Lara; Clive Leona, A. Thodey, D. M. Aitken, A. R. Kelsey, A. F. Hooper, Dr. Hornbrook, Dr. W. Macanah, Dr. W. H. Lang—all Melbourne. From South Australia: Hon. D. J. Gordon, Adelaide. From Tasmania: Mr. E. M. Garsia, Irishtown. From Western Australia: Mr. Thomas Wells, Monksleigh. From England: Messrs. C. Westropp, Long Melford; H. Stansfield, London; Dr. Williams, Berkhamsted. From South America: Mr. C. W. J. Keppel, Buenos Aires. From Africa: Mr. H. E. Hays, Bulawayo.

Visitors to Sydney Office.—From New South Wales: H. Marr, Petersham; J. G. Fletcher, Waitea; A. W. Perry, Booraw; Chas. Binie, 4D; W. W. Killen, Merribee; G. L. Ryder, Quand; J. A. Wallace, Charleville; W. E. Abbott, Murrulla; S. Rober Gosford; A. H. Jeffreys, Delegate; Canon H. K. Archdall, Ard dale; D. Reynolds, Tocai; A. H. Norton, Wandook; F. B. Fleming Holmleigh; J. J. Baylis, Pranjip (Vic.); H. A. Hay, Collindin; K. H. M. Kennedy, Quirindi; T. K. Abbott, Murrulla; F. C. Rolands, Waingoola; J. Scott, Eureka; D. Macfarlane, Teviot; J. Sautelle, Burnima; G. F. Doyle, Cardington Hall; A. F. Chatsbury; F. File, Bolaro; S. M. Osborne, Bolaro; J. S. R. Crawford, Rob Roy; A. K. Butter, Trangie; J. Richardson, Berea; J. H. Fairbairn, Micalago; J. T. Gavel, Gulgo; W. R. Scott, Kurr jong Hills; H. C. Carter, Mooki Springs; J. B. Macfarlane, Eureka; A. H. Wright, Tombong; J. E. Foord, Montrose; G. Garnock, Rock; T. K. Chisholm, Goulburn; G. Massy, Gundaroo; W. Jaques, Buginbone; R. R. Dangar, Mooki Springs; E. Kille Nimagee; Dr. N. W. Kater, Eenaweena; S. W. Tindale, Cramb; C. E. Prell, Gundowringa; E. Lloyd Jones, Hambleton Hill. From Sydney: A. Lang, A. G. Sewell, C. E. H. Maitland, G. Maddiso; J. W. Allen, J. B. Cramsie, G. M. Badgery, R. Atlee Hunt, O. Friend. From Queensland: Hy. Friend, Vahreepa; A. J. Cotto; Hidden Vale; J. Bain, Brisbane; W. R. Slade, Glenelg; R. Heat; Brisbane; S. Chapman, Brisbane; Jas. Friend, Vahreepa; M. J. Bishop, Longreach. From Victoria: S. V. Stead, Melbourne; E. N. Twopeny, Melbourne. From Western Australia: Wm. Parbury, Guildford; D. V. Hosking, Port Hedland; M. Corbett, Muccan. From South Australia: Donald Forbes, Collingrove; From South Africa: A. G. Bartiman, A. J. Olivier, D. J. Erasmus; C. Basson, L. P. J. Badenhorst, A. R. Van der Merve, H. Hays, J. H. Kruger. From New Zealand: Mr. and Mrs. H. Harrowell, Auckland. From Tasmania: H. Macarthy; F. C. Pitt, Glen Dhu; J. Pitt, Glen Dhu; R. Taylor, Green Hill.

Tick Birds.

Mr. Miles Carroll, Antsirabe, Madagascar, writes us:—"Mr. J. P. Chisholm is probably right (in his note in your August number) re the introduction of the tick bird into Australia being as a drop in the ocean. It would take many years to breed up for such a large country, and likelihood enough they would not succeed in all or any locality. As far as Madagascar is concerned I have not found the tick bird (*Ardea bubulcus*) in any but well watered localities, but altitude makes no difference to them, they thrive 6000 ft above sea level (where in winter the frosts are severe) just as well as on the low lying plains. On the dry plains to the south, however, there are none to be seen.

"Yet the bird is so beautiful and so useful that it would be well worth your while having it. A flock of them is a sight worth seeing, and it's a pleasure indeed to watch them among the cattle. Generally there are one or two to each beast, they keep pace with the animal, pick up any ticks that drop, and snap at any a bit gorged. I think the same birds exist in parts of South Africa; I saw some in the Zoological Gardens in Pretoria. They are also to be found in India. 'The egrets stalked among the buffalo' (Light on Asia).

"There are several other birds that will eat ticks, but the *Ardea bubulcus* is the real tick bird, for it alone will neglect other food and stay with the cattle from early morning till dark. They also follow horses and donkeys.

"In parts of this country we shall have to build dips, but there are favoured spots where the tick birds abound, and keep the stock clean, and they are a never-failing object of ever changing interest and beauty."

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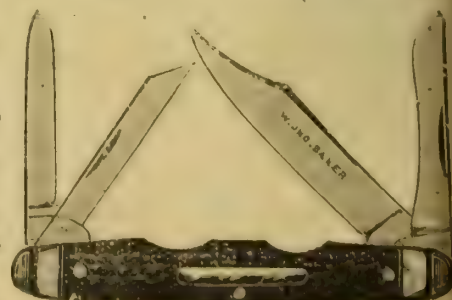
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Sir John Higgins, chairman of the British Australian Wool Realisation Association, presided over a most important conference of every section of the Australian Wool Industry in Melbourne last month, and set before those present certain principles, which, in the main, were adopted by the conference for the disposal of Australian wool and avoidance of the crisis which threatens the industry. The objects of the scheme are to ascertain what proportion of the wool on the market of the world can be absorbed, and to regulate the supply. The placing of a reserve is not regarded as a fixing of prices, but as the making of a reserve limit in order that growers and brokers may be on the one footing. Also the redemption of about £5,000,000 worth of priority wool certificates on July 31 is designed to give relief to the financial position by facilitating financial institutions granting assistance to growers in necessitous circumstances.

The question is one of such importance, concerning as it does one of the most serious problems affecting Australia to-day, that we reproduce Sir John Higgins' address in extenso. After referring to the formation of the British Australian Wool Realisation Association, he said:—

It will be of interest to the Australian wool industry to be advised that the assets of the association were fixed by the directors of the association on 14th March at £22,000,000, which will be apportioned as follows:—

£10,000,000 as priority wool certificates, non-interest bearing and redeemable at will. These certificates will eventually be worth their face value, but the exact date of their retirement will depend on receipts from sales of wool, and the financial operations of the company.

£12,000,000 as ordinary shares of £1 each.

The value of the shares will depend absolutely on the market price of wool current for the next two or three years, or perhaps for even a longer period.

Both priority wool certificates and shares will be negotiable.

On account of the magnitude of the task involved, it will be some time before the certificates and scrip can be made available. There are over 149,000 separate wool accounts to be dealt with, and after making provision for the retirement of small growers' interests, the registers for priority wool certificates and the registers for shares will each contain about 70,000 names.

To carry out the objects of the association is likely to be a task of the utmost difficulty, and the directors make an earnest appeal to those interested in wool to study the problem in all its bearings with the closest attention. It is common knowledge that a large surplus of wool exists, especially of crossbred wool of medium and low grades. The world-wide condition of the wool textile trade, the occupation of German territory by Allied troops, and the disturbed state of affairs in Eastern and Central Europe, with depressed exchange practically over the entire continent, do not promise well for the free consumption of wool and the absorption of the existing surplus at an early date. The association will, therefore, be called upon for the next two or three years, or longer, to face a situation in which more wool will be available than the trade may be capable of buying, or can absorb. The association has been called into existence for the purpose of handling this difficult position with all possible tact, firmness, and skill, it being generally recognised that ruinous results will follow unless matters are directed with the greatest care and competence. It must, however, be evident to the wool industry that the association is only in control of a portion of the available wool. Close attention, therefore, must be paid to the simultaneous marketing of the old and new clip wool, in such a manner as to divide the sales in such proportions between the respective interests and to secure reasonable payable prices for Merino wools, and to minimise the loss on crossbred wools as much as possible.

It has been pointed out that, up to the present, the amount of old clip wool sold in England (none having been disposed of in Australia) since 1st October (the opening of the Australian sales) is very much lower in proportion to new clip wool than can be accepted as equitable or satisfactory. It seems to be the desire of Australian woolbrokers to offer at auction in Australia from 100,000 to 200,000 bales per month, while at the same time Australian new clip wool, shipped by Australian wool firms, is arriving in London in increasing quantities for disposal in that market. Unless some agreement is immediately arrived at, the result will be for the auction sales of new clip wool, especially in London, to be much more successful than British Australian Wool Realisation Association sales, because London woolbrokers, acting for private sellers, become aware of the British Australian Wool Realisation Association limits, and cut under them to a sufficient extent to sell practically the whole of their wool, leaving to British Australian Wool Realisation Association a very small share of the business.

It must be remembered that whilst British Australian Wool Realisation Association controls on account of its shareholders 900,000 bales of Australian carry-over wool, the British Government possesses much larger stocks of wool, comprising approximately—

900,000 bales of Australian carry-over wool.

800,000 bales of New Zealand carry-over wool, and Cape and other wools.

The British Government, when it accepted the Australian proposal for a division of wool assets on a certain date in cash—if any—and kind, and agreed, *inter alia*, to the formation and constitution of British Australian Wool Realisation Association, stipulated that the agency for the disposal of the British Government-owned Australian wool was subject to the condition that the agency could be revoked at any time by the British Government should occasion arise.

It is evident, therefore, that the British Australian Wool Realisation Association cannot conform to the agency provision and permit the present state of affairs to be continued, and it will have to be made known very clearly to sellers of new clip wool, both in Australia and in London, that offerings will have to be regulated. Unless the allocation of wool for auction sales and fixation of reasonable reserves are placed on a sound and equitable basis, the association may of necessity have to start selling carry-over wool in competition with current clip wool, and with such large supplies on hand such a course would be ruinous to all concerned. It is clear that competition of this character would prejudice all sources of finance for woolgrowers and users of wool, and leading to lower and lower prices would demoralise the buying market for wool and all the products of wool, and would hurt the woollen textile industry quite as much as it would hurt the woolgrowers.

It has been suggested that the association would be able to find a market for its wool outside the ordinary auction channels by means of special arrangements with the central and eastern countries of Europe. Inquiries made indicate that prospects of trade in those directions are not bright. It has been reported that South African delegates, when visiting Germany on behalf of their Government, offered profitable contracts for steel rails as an inducement to Germany to buy Cape wool, and they had returned without getting a bid, the German Government having strongly discouraged any large deals of imported material. The British Government has recently sold moderate quantities of wool to Austria and Poland on very easy terms of credit, which amounted almost to allowing the buyer to pay whenever it was convenient to him. More business on those lines could probably be done with Roumania, Czecho-Slovakia, and Poland, but the directors of the British Australian Wool Realisation Association would have to consider very carefully whether this would not in practice amount to something very like giving away the wool. Quite apart from the risk of loss to the association, it would have to be carefully considered how far it was fair to sell wool on such easy terms if the products were liable to be sold in neutral markets in competition with goods exported from Great Britain and the Dominions where the manufacturers were expected to pay cash for their raw material. From these few remarks it will be evident that the question of sales of carry-over wool on terms to Central and Eastern European countries is not a simple matter, but one demanding careful consideration and thorough investigation if all interests are to be properly protected.

In order to convey some idea of the actual wool position in relation to the current Australian clip, approximately 500,000 bales have been offered at the Australian auctions since 1st October, the date of the resumption of sales subsequent to cessation of appraisements by the Central Wool Committee under the contracts with the British Government.

The quantity sold at auction amounts to 278,000 bales, say 55 per cent. of offerings. Certainly a substantial percentage of the withdrawn wool has since been disposed of by private treaty, but even if all the wool offered had been sold it represents such a serious curtailment of sales as to cause anxiety. Under pre-war conditions the Australian clip was practically marketed by the end of March. To-day there are of the 1920-1921 clip in Australian warehouses awaiting sale 800,000 bales; in addition, there is wool on stations and in transit, also wool on the water and in London warehouses. It must also be borne in mind that the current clip of Merino wool, on account of the effects of the drought, is far below normal in quality; that only the superior wool—the pick of the clip—has been competed for at auctions; that the balance on hand is inferior, and when a market is found for such wool it may be so discounted that it is not probable that it will return to Australian growers even the cost of production.

The statistics compiled regarding the quantity of new clip wool sold in Australia since the 1st October last are unsatisfactory, but when read in conjunction with the continuous decline in prices the position, generally, is one of gravity, and demands the earnest attention, not only of all directly

interested in the wool industry, but of every Australian citizen.

In the Central Wool Committee's annual report of the 28th July, 1919, the following paragraph appears:—

"Should the carry-over on 30th June, 1920, of appraised wool for shipment be considerable, and there is a probability of this being the case, it will constitute a serious menace to the resumption of auction sales during the first season following the termination of the control period, and the Central Wool Committee take this opportunity of sounding a note of warning to woolgrowers of the position that is likely to arise in marketing the Australian clip for the season 1920-21 in the event of a large carry-over of Imperial Government wools."

Unfortunately that forecast has been more than confirmed. The texts of the cablegrams re auctioning of wool, and covering the period from October last to date, between Director-General of Raw Materials and the Central Wool Committee and British Australian Wool Realisation Association, on the subject of the disposal of wool, have been disclosed to the conference.

The Director-General of Raw Materials, the Central Wool Committee, and Directors of British Australian Wool Realisation Association have, since the completion of the wool contracts with the British Government, recognised the desirability and necessity for unified methods and action in the disposal of the surplus stocks of wools. From time to time the Central Wool Committee and Directors of British Australian Wool Realisation Association have indicated to Associations of Australian Woolgrowers and Woolbrokers the absolute and imperative necessary for co-operative and joint action in the allocation of quantities of wool for auction sales, and fixation of reserves, and it is most regrettable indeed that, up to the present time, although definite methods have been formulated by British Australian Wool Realisation Association, and accepted in principle by woolbrokers, they have not been carried out.

It was admitted at the conference on the 14th February last, between the directors and the consultative committee of British Australian Wool Realisation Association and the executive of the National Council of Wool Selling Brokers of Australia, that the principles of—

- (a) The regulation of wool allocations for auction sales in England and Australia, and
- (b) The fixation of reasonable selling reserves based upon the cost of wool production in the Commonwealth, are both sound and equitable, and
- (c) That such arrangements were practicable and desirable in the interests of wool producers, wool users, banks and financial houses, and generally advantageous to the wool industry as a whole in Great Britain and Australia.

I desire at this stage to particularly emphasise this fact, that the directors of British Australian Wool Realisation Association in submitting the suggestion for the allocation of the quantities of wool for auction sales and the fixation of reserves—not prices—on wool in no manner wish to recommend or attempt the installation of a scheme for price-fixing.

In order to prevent the very serious crisis now threatening the Australian wool industry, they advise the adoption of a temporary expedient for the stabilisation of the value of wool, which will be based, as far as practicable, upon the cost of production. Immediately the big stocks of carry-over wool have been absorbed, this temporary method can be discarded and the law of supply and demand again become fully operative.

It is needless for me to remind the members of this important conference of the very heavy cost incurred in the production of wool to-day, as compared with pre-war times. Taxation in its many complicated and vexatious forms is so serious a burden as to be a positive menace to Australia's most important primary industry. The ruling rates for stores and materials, also plant and appliances, are extremely high. Transport charges on land and water are continually advancing, whilst labour becomes more difficult to obtain at ever increasing wages.

With such numerous additional costs in the production of raw wool it is vital at the present juncture that every individual interested in the industry should recognise what the continuous decline in wool values means; should appreciate the seriousness of the position into which woolgrowing in Australia is drifting, which unless checked and confidence immediately restored, can have only one ending. The directors of British Australian Wool Realisation Association realise that the time has arrived when the facts, however unpleasant they may be, should be faced.

The result of diminished sales and reduction in values concerns the whole of the Commonwealth. Every citizen is affected. For the past three wool years the distribution of money from appraisements averaged £47,823,688 per annum.

The returns from the 1920-21 clip will fall very far short indeed of such figures—probably will not amount to 50 per cent.

This address so far has disclosed a gloomy picture, but the directors of British Australian Wool Realisation Association, who are directly interested in the disposal of the carry-over wool, are satisfied that the position can still be saved and confidence restored in the wool industry. To do so it is imperatively necessary for woolgrowers to co-operate, practically and wholeheartedly—there must not be half measures. Woolbrokers should do likewise, and these two main divisions of the Australian wool industry should work together for the stabilisation of wool and the betterment of the wool industry as a whole.

Real success can only be achieved by co-ordination between Australia and London respecting the allocations for auction sales and fixation of reserves. Buyers will not operate beyond hand to mouth requirements until some form of stabilisation has been reached. There are manufacturers and their representatives in this room who will confirm this statement. There are many important buyers who are ready to support a proposal for the stabilisation of wool. Wools in ample quantities to meet the many and varied needs of manufacturers must be available at each series of auction sales.

Should a crisis occur in the wool trade, not only wool itself, but sheepskins, live sheep, pastoral and farming lands, and woollen industries of all kinds must suffer, and the effect would be felt in every section of life and business throughout the Commonwealth. The responsibility of declaring these facts is recognised.

I have taken a long time to reach my point, but there is so much at stake that I have been anxious to cover the whole position as it is understood by the directors of British Australian Wool Realisation Association. The question I wish to put to this conference, which represents every branch of the Australian wool industry, is:—

Are the woolgrowers and woolbrokers of Australia prepared to co-operate and co-ordinate for the stabilisation of Australian Wool?

Personal gain by one grower, one broker, or one manufacturer, at the expense of another grower, or broker, or manufacturer, will have to be dismissed. It will be necessary to think, not from the individual, but the national standpoint, and to act in concert for the safety and betterment of the whole industry, and not a particular part.

If the members of this conference recognise, as the directors of British Australian Wool Realisation Association believe they will, the paramount importance of co-operative effort for the stabilisation of wool, then the proposed method for achieving that result can be outlined and discussed.

After debate the conference adjourned until 11 o'clock the following day. On its resumption the chairman's suggestions were again considered, and Hon. A. H. Whittingham, M.L.C. (Queensland), moved:—

- "(a) That the allocation of the quantities of wool for submission at auction sales in England and Australia be arranged by the British and Australian Boards of British Australian Wool Realisation Association subject to the proviso that the quantity allocated for Australian auctions must not be less than British offer-

ings. It is understood that the Australian Board of British Australian Wool Realisation Association will advise the Executive Committee of National Woolbrokers' Council of all market movements and developments.

- "(b) That minimum reserves be placed on British Australian Wool Realisation Association Wools and current clip of wool on parity limits to be agreed upon between British Australian Wool Realisation Association and National Council of Wool Selling Brokers of Australia.

- "(c) Should these bodies fail to agree as to the quantities to be offered and the minimum limits, any differences shall be remitted to an Appeal Board consisting of three representatives appointed by National Council of Wool Selling Brokers and three representatives appointed by British Australian Wool Realisation Association, the chairman of Wool Realisation Association to be chairman of the Appeal Board and have a casting vote.

- "(d) That the period of operation remain in force until the 30th September, 1922, when the matter shall again be reviewed.

- "(e) That British Australian Wool Realisation Association accepts the responsibility of redeeming about £5,000,000 priority wool certificates on or before 31st July, 1921.

- "(f) That the members of this conference are in unanimous agreement as to the imperative necessity of giving effect to the above resolutions."

The motion was seconded by Senator Fairbairn (Victoria) and unanimously agreed to.

Advice to Young Shorthorn Breeders.

Mr. George A. Bruce, of Inshfield, one of Scotland's most famous and successful Shorthorn breeders, writing to "The Shorthorn World," gives the following as the ten most important things for a new breeder to bear in mind:—

1. **Study the Subject.**—Having decided to start Shorthorn breeding, keep turning the subject over in your mind in all its bearings; educate yourself by getting into touch with the men in the Shorthorn world; attend shows and sales and get to know the correct type of cattle you ought to buy, and their current selling values. Become acquainted with pedigrees, gaining an idea of the quality of the ancestors from which the animals are bred so that when you begin to purchase you can avoid making the mistake of buying what later on may have to be sold off as unsuitable to continue breeding from.

2. **Build up your Herd on Good Foundation Stock.**—There are in my opinion two ways of securing this good foundation. The first is for the man with large capital at his command, who has only to select from the best herds, and offer a price which will tempt the owner to part with the cattle selected. Selection of stock by this method at once gives a prominence and a hall-mark to young herds, it early secures the attention of buyers and good results are often obtained from the start. The second method is more fitted for the man who has the desire to own and breed high-class stock, but who has to consider his purse along with his purchase, or for the young man with life in front of him who has time to breed a herd from a smaller foundation. It is undoubtedly relatively slower, as it is a case of breeding rather than buying a herd, and a few lean years will intervene while the herd is being increased in numbers. Fortune did not allow me to follow the first method, and any suggestions I may be able to offer from personal experience are therefore more fitted for those who adopt the latter course.

Do not rush your buying and do not be in a hurry to possess numbers. It is infinitely better to have a few quality cattle than a number of nondescripts. Having fixed in your mind the type you want, buy only that which comes within

measurable distance of your ideal, preferably females in calf to a good bull. Their produce can be retained and a herd bred from them in a comparatively short time. Suitable additions may be made as time goes on, and still further to improve the herd, weed out and dispose of the second rate animals, but do not be tempted at first to part with the best. Keep the best to breed from, as I have proved the truth of the saying that "like has a tendency to produce like."

3. Keep a Good Stock Bull.—It is also true that "the bull is half the herd." Every calf you breed is either a son or daughter of your stock bull. Great care should therefore be exercised in the selection of a head to the herd. He should be as good as you can afford to buy, and from a herd of good standing. If in addition to his individual merit he is descended from a line of good individual ancestors, he is all the more likely to be an impressive and successful breeder.

4. Keep Your Cattle in Good Health.—Special precautions should be taken to insure that contagious abortion is not introduced by purchase from an infected herd. The tuberculin test has now become such an important factor in determining the value of purebred cattle that every effort must be made to keep the animals free from tuberculosis. The young should be kept separated from the older stock and in the open air as much as possible to lessen the risk of tubercular infection.

5. Exercise Care in Feeding.—Do not let the calf fall back in condition after weaning. Keep on the calf flesh, feed well but do not get them beyond a full natural condition, as overfeeding is detrimental to the best results in breeding. When feeding specially for show or sale aim at getting the cattle as fit as possible at the time they are to be presented to the public. Cattle, like fruit, are ripe only for a short time, and over-ripeness leads to staleness and loss of bloom. Forcing on heating foods causes a shedding of the hair and a dryness in the coat which greatly detract from the animal's appearance in the show ring.

6. Allow Sufficient Exercise.—This is essential when cattle are being heavily fed. Exercise improves the appetite and the general health, and the lack of it weakens the legs, with a consequent loss of gaiety when on parade, and in some cases the complete loss of the power to walk.

7. Keep Accurate Records.—Records to be anything must be accurate. A register should be kept showing service and calving dates, also the sex and colour of produce, with prices made or prizes won by members of the various families.

8. Market Honestly.—When selling know that your statements, verbal as well as printed, are absolutely true, and that a buyer has every chance of getting satisfaction with what he buys from you. Only by having a well-founded confidence in what you offer can you gain and hold the confidence of the public.

9. Secure and Retain a Good Cattleman.—An attendant without special interest in his charge is useless for a pedigree herd, as the finest cattle may appear quite ordinary unless they have been properly attended to. The proud position at present held by the Scottish Shorthorn has been gained in no small measure by the untiring, almost loving, attention of the men to whose care the herds have been entrusted.

Encourage your cattleman, not only financially, but also by taking an interest in him and his work. Talk of Shorthorns to him, keep him posted up in the Shorthorn news of the day, let him have the sale catalogue and agricultural press to read. Discuss the progress being made by animals under his care.

10. Give Personal Supervision.—No matter how good the cattleman may be, remember "It is the master's eye that feeds the ox," and it is up to you to see what is being done. If the herdsman is good it is his delight to have his good work seen by his master, and if he is not good there is still more need for your keeping an eye on the man and his work. The owner ought to be competent to give helpful advice to a capable cattleman and to train a young man if he fails to get the services of a capable one.

Cure for Footrot.

Arsenic v. Bluestone.

We publish herewith a few more letters re the statement of a New Zealand correspondent in our February issue that in his experience the only thoroughly effective cure for footrot was an arsenical preparation, and that, moreover, in many cases it was not necessary when using this mixture to pare the hoof.

Mr. C. A. Gibson, of Bulgandra, Albury, N.S.W., writes:—"Re Mr. H. T. J. Hume's letter re footrot dressing. As an old sheep man, born to the game and experienced with footrot all my life, I was amazed to read of such treatment and cure—unless for scald between the hoof, that is, the early stage of footrot. I have never seen the disease cured without properly paring the foot to remove all the diseased part, and this usually has to be done two or three times or more, and a dressing applied—tar and bluestone or some other good prepared dressing—before a cure can be made. Surely Mr. Hume cannot mean he has cured footrotty sheep when the rot has got under the hoof without paring. If he has such a preparation, well, all I can say is I know nothing about footrot, and I thought I was an expert at treating it. I think Mr. Hume should explain the exact condition of the sheep's feet he treated and cured."

A Western Australian writes that he has had no experience of footrot, but says:—"I remember many years ago it was considered a good thing to run sheep through races where lime had been strewn on the ground."

The Chief Inspector of Stock, Western Australia, says:—"In the past preparations of the nature referred to have been used with much success in the treatment of this disease, and it is possible that in instances better results may have been obtained from this form of treatment than would be the case in using a solution of copper sulphate (bluestone). It is often advantageous, however, where one preparation is not proving satisfactory, to revert to the other, or vice versa. When the disease is in an advanced form, it is practically impossible to effect a cure without cutting away any portion of the foot which may be under-run."

Mr. Norman Rutherford, Mendip Hills, Parnassus, N.Z., writes:—"I have tried every known cure for this disease, and have found bluestone the only sure one. Some few years ago, during a very wet season, footrot broke out in about 2000 Merino ewes; after putting through bluestone three times these were completely cured, and I am thankful to say I have not had any trouble since. I have not tried the arsenical specific mentioned by Mr. Hume, but if it is better than bluestone it must be very good."

Mr. Alex. Taylor, F.R.C.V.S., Canterbury Agricultural College, Lincoln, N.Z., says:—"The essential properties of a good footrot dressing are, that it be antiseptic, astringent and slightly caustic. All these are possessed by suitable solutions of bluestone, antimony, or arsenic, and each of them would probably find about an equal number of sheep men to uphold its reputation of being the best. Whatever dressing is used, it is necessary that it reach the depth of the sore, and in almost every case to allow this it is necessary to pare away the overgrown and diseased horn. From the surgical point of view this is really the crux of the treatment. Even after this is done, a minute would be the minimum time for the sheep to be in the foot bath, so that the sore might be thoroughly saturated with the dressing."

Another Western Australian, Mr. T. H. Wilding, Mokine, W.A., gives his experience with arsenic. He says:—"About thirty-six years ago, in the days of shepherding, we suffered from footrot in our sheep owing to a travelling flock dropping affected ones behind on our run. Our flocks got badly infected. It spread rapidly, no doubt owing to camping the sheep on the same ground each night. It got so bad that hundreds of the sheep were trying to get about on their knees. The blowflies attacked their feet, and they got in a fearful condition, and we tried every remedy we could hear of, amongst them bluestone. But for two years we only kept it in check, and could not eradicate it. We then tried arsenic and washing soda. As near as I can remember, we used 1 lb. of each to 20 gallons of water, boiled it, and

used it warm in about 50 ft. of troughing—sufficient first to cover the feet, allowing the sheep to stand about one minute in the trough. This completely cured them, and we have never had any of the trouble here since."

Mr. J. S. Jessep, Waihi Station, Wairoa, Hawkes Bay, New Zealand, says:—"I have found bluestone effective as a run-through wash, provided the weather is not too wet, but if stock are badly affected and the weather moist as in a droppy season, something stronger is needed, and I use a straightout arsenic mixture, and deep enough to cover the feet."

Mr. W. T. Merriman, Merryville, Yass, writes:—"We have not been troubled in this district for very many years with footrot, but about 40 years ago almost every flock of sheep in these parts was badly affected with the disease. Many things were tried for it, including bluestone, but with only partial success, until my father (the late Geo. Merriman) tried arsenic, and effected a permanent cure, and there has never been a case of footrot on our place since that I am aware of. My father made his cure known to other sheep-owners, with the result that the disease was banished from the district in a very short time. The only ingredients used were arsenic dissolved with soda and water."

Mr. Chas. Goulter, Hawkesbury, Blenheim, New Zealand, writes:—"Some ten or twelve years ago I had six or seven hundred Merino ewes that were in a most deplorable state. These sheep were running in a swampy paddock with dry ground between the swamps. I built a footrot race and yards in the paddock, and got to work with bluestone, after paring them well right down to the healthy tissue at intervals. This method after a year was abandoned, and was not a success. I then purchased a copper boiler and arsenic, also washing soda and salt. The proportions are as follows:—Salt, 3 lbs.; washing soda, 3 lbs.; arsenic, 3 lbs.; put into 16 gallons of water, simmer and boil for 20 minutes. The sheep were then got in and thoroughly pared down to the healthy tissue, and then were run through the mixture hot, 1½ in. deep and 30 ft. through the race, any bad cases being held for one minute, and turned into a stony isolation paddock. I completely cured the whole mob with this treatment. Any sheep that is badly affected with the disease, and has malformed, ringboned hoofs must be pared quite bare of all hoof. It is my opinion that no mixture made will cure an animal so affected without paring."

Sheep on the Wheat Farm in Western Australia.

BY HUGH MCCALLUM, SHEEP AND WOOL INSPECTOR.

The following article is from a bulletin issued by the Sheep and Wool Division of the Department of Agriculture, W.A.:—

The farmer is daily finding out the value of sheep on the wheat farm. The man on the land now realises that no farm is complete without sheep, under present day conditions. They are a necessity to enable him to obtain the highest possible return for his wheat or hay. The sheep enrich the land. They also keep same clean, as they will eat off all pastures prior to cultivation, which enables the crop not to be over-run with various grasses and weeds that come up with the crops should there be no sheep kept. Therefore, they take a definite part in the production of crops.

Where sheep are not pastured on the farm, grasses and weeds grow up with the crops, and absorb a certain amount of nourishment—that otherwise would be available for the crops. From such unclean land the farmer cannot expect the returns to be as large as from clean land. Where sheep are kept stubble need not be destroyed, as the sheep can feed on it. This can also be stacked as a reserve of feed should there be a dry year. The grower who has a stock of stubble can always command a big price for same when feed is scarce. Reserves in feed of any kind, either in hay, stubble, straw, or chaff, are a necessity on a farm. Just as bankers or manufacturers must have reserves to conduct their businesses satisfactorily, so must the farmer have plenty of feed and water to see him through a dry season.

It will not then be necessary for him to place his stock on perhaps a falling market.

Contrast the difference of the farmer who prepares for a dry summer to the man who, by not looking ahead, has had to place his stock on the market at a time when there is a glut. He has either to sell or see his stock die. The producers are conducting a business that requires every possible attention to make it successful; and to the man who conducts farming on business principles prosperity is assured. Should the crops be a failure from any unforeseen circumstances (wheat failures do occur) and sheep are not kept, there is no income. But if sheep are pastured there is a return from wool and mutton. This writer's advice is—keep sheep where possible.

The farmer should take a thorough interest in his flocks, small or large. In Western Australia, where land can be had on very favourable terms, there are opportunities for mixed farming which do not exist in other parts of Australia; and when wire and netting are available, and provision made for water by dams or wells on the holdings, prosperity will be assured, for you have two sources of income—wool and wheat. Farmers who for years only relied on wheat, and could not by any persuasive means be induced to purchase sheep, thinking they could not look after them and grow wheat at the same time, have followed the example of those who have done well, after seeing their big returns. They have informed me that they regret not having had sheep years ago. These people are increasing their flocks, both in number and quantity of wool, type and frame.

Practical experience is the sure road to success, and by keeping sheep the owner is daily learning more about them, and copying others who have made a success with sheep. Become acquainted with your sheep, and learn by comparison with standard works and leading journals published on stock. These articles are the results of practical experience, extending over many years, of men who have acquired it after years of hard work. All this is available to the beginner to start off with at little cost.

The climatic conditions of Western Australia are such that the Merino sheep will do well anywhere, except on the southern and south-west coast country, where Longwools do remarkably well, and would give better results than the Merino. If possible, when the first flock is purchased, buy from those who are noted for having sheep of quality, being large-framed, growing a fleece of long combing wool, that are bred on country similar to your own. Few mistakes can be made if this advice is followed. There are many different classes of sheep, and the farmer should try to keep his flock true to type. If it can be avoided, do not buy a mixed flock that consists of everything in the sheep line, and expect to build up a flock that will give you big returns in wool. This is impossible from such a flock. Keep sheep that give you the best returns per head. Why keep sheep that cut you only 4 or 5 lbs. of wool per head when you can have a return of twice that amount and even more from good sheep. As an illustration, a farmer runs 300 sheep giving a return of 4 lbs. wool per head. This is only equal to 150 sheep giving a return of 8 lbs. per head. Look at the loss of feed used by poor-woolled sheep compared with a few good ones that will give an equal return. All over our farming areas you can grow wool of good value by careful selection and breeding a large-framed sheep. Western Australia has proved its adaptability for growing wool from the south to the north, and as our lands are sparsely stocked, millions of acres of land are available for settlement in almost every part of the State.

The same land in a few years' time will be able to carry many millions of sheep. The Merino sheep is of a hardy constitution; it will stand almost any hardship, and will live on anything such as bush or low scrub in bad times, providing it has plenty of water. Its good qualities are too numerous to particularise, but as a wool and mutton producer it stands unrivalled. It is the most useful sheep for the farmer, and requires little attention. Study the feeds grown on your pastures and learn to know if your stock are doing well. You cannot learn too much regarding their requirements, and the owner who takes interest in their welfare must gain knowledge.

Do not eat out your paddocks before changing the sheep to another paddock. This mistake is often the cause of sheep losing condition through neglect, and often it has been

thought that the sheep are not suitable to the land. This is not the case. Yearly, the experience gained by having sheep helps you to be more proficient, and it is within the power of every farmer to have a good flock that will yield big returns from wool and mutton. The farmer who has kept sheep for years is always glad to help the new man along with any knowledge he may possess.

Western Australia is free from sheep diseases, and can grow sheep of good constitution. This is everything where breeding is concerned. In many cases where sheep do not thrive, it is not the fault of the pastures, but the class of sheep. What do they consist of? Every possible kind. How are they bred? It is hard to state, for the reason that they were never cared for or culled; just allowed to breed anyhow, year in, year out. Were the undesirable units of the flock ever taken away? Was new blood introduced? If not, how is it possible for a flock to be kept pure? Such breeding has one result—sheep of a weak constitution. This class cannot stand any hardships. They are the first to die when dry times come. The object of the farmer should be to raise and retain that sheep which will pay best for the consumption of its food. Strength, activity, constitution and suitability of the pastures are the first objects for a breeder. Culling is of the utmost importance, to get your flock up to a standard regarding constitution. Make up your own mind what sort of sheep will best suit your district and climate—Merino, crossbreds, or Longwools—and what you wish to breed. Having done this, stick to same, and do not be led away by one and another regarding your line of breeding if you have one type. Do not buy a strange ram to mate with your flock, unless you are certain that you have got the sire you need for selection. It is by this means that the advantage is to be reaped. No good flock ever existed that was not of a type. A type cannot be fixed by any other method than selection. Having decided on your type, let uniformity be your watchword. Do not purchase rams this year from one breeder and next year from another, who has a sheep varying from its predecessor in some essential quality. By this means you might retard, if not altogether prevent, improvement in your flock. Therefore have a distinct object, and stick to it; the mixed flocks which one sees so frequently will then soon disappear.

Breeding Immature Females.

BY W. F. STEVENS.

Much is appearing in the agricultural press at present on the above subject, and the results of experiments not unfavourable to the above are given wide publicity without a word of caution to inexperienced breeders. In view of the fact that the theory is diametrically opposed to the conclusions of experienced and successful stock growers, a word of caution might well be combined with such information in order that the inexperienced may not yield too readily to the temptation that comes to all beginners, namely, that of achieving results at as early a date as possible.

We hope that we are not so conservative as to hold that whatever is, is right; and we have no desire to be so radical as to hold that whatever is not, has been untried. The latter appears to be the belief of many who are to-day arguing in favour of early breeding. The fact is that those of us who have reached middle age have seen it tried out on all classes of animals and found wanting.

Three events stand out prominently in the writer's mind in connection with the practice of breeding immature animals (females), and in every instance the conclusion arrived at was that the practice is a bad one. The first event occurred when he was in his early teens. A neighbour lad had been induced to part with his meagre savings for an immature ewe that was found to be in lamb. Naturally, the lad was anxious to secure his father's approval of the transaction. The father, besides being a successful stock grower, was also a bit of a philosopher, and he said in substance: "My boy, you can convert this into a very profitable bargain, if you learn from it never to buy an animal that has been bred too

young." The lamb in question died endeavouring to give birth to her young, and the lad, as well as those of us who knew him, took seriously the advice given him by his father. To us it appears as true to-day as it was then.

Later on, the writer spent several years in that part of the United States which is usually referred to as the "Middle West." Corn and hogs were the main dependence of the farmers there at that time. It was during this period that the saying was "coined" that every farmer's ambition was to buy more land to grow more corn to feed more hogs to get more money to buy more land, &c. It was the practice then to select the most promising gilts from among each lot of pigs for the next year's brood sows, and to fatten them along with their progeny, and send them to market the following autumn or winter, saving from amongst their progeny the most promising females for their next year's stock of breeding animals. At the end of ten years the practice was almost abandoned, because they found that generally the third or fourth, or at most the fifth, generation resulted in small litters containing a large percentage of unthrifty pigs. This, observing breeders concluded, was the result of continued immature breeding.

The third event occurred at the time of the first "Short-course School in Agriculture" held in Edmonton, in Canada. Mr. H. A. Craig, who is at present Canadian Deputy Minister of Agriculture, was in charge of the school, and C. M. MacRae, now a member of the Live Stock Branch at Ottawa, was conducting a class in the judging of beef steers. There were four animals in the ring, two of which had been contributed by a farmer in the vicinity. These were smooth and of good quality, but undersized and lacking in substance.

After the students had passed judgment on the animals, and given their reasons therefor, Mr. MacRae pronounced judgment on their opinions and selections. When referring to the two steers mentioned, he used the following forceful language:—"In these animals we see the curse of immature breeding. My advice to every beginner who has an ambition to build up a herd, is to resist the temptation to practise it. Temptations there are many, but the practice always ends in disappointment and failure."

If Mr. MacRae was at that time a sufficiently good authority on live stock growing and breeding to justify the Alberta Government in employing him for the important work in which he was engaged, we should be justified in cautioning inexperienced breeders against adopting a practice diametrically opposed to that recommended by him. We have seen aspiring breeders enter the ring with animals that promised success for their owners, and a few years later saw these same breeders exhibiting or offering for sale animals that were undersized or off type, and we have found upon inquiring into the causes of this deterioration that in most cases immature breeding was practised.

Lack of care, improper feeding, injudicious mating and immature breeding may be set down as the four principal causes of deterioration in both our pure-bred and commercial herds, and of these immature breeding, although placed last, is by no means least in the list of failures that may be charged against it. One of the deceptive things connected with it is that the detrimental effects of the system do not become apparent in the first generation, and often not in the second, and when good care is given the animals, not in the third, but seldom does it fail to become noticeable after that time, and then it requires more years of careful breeding and selection to rebuild the herd than were necessary to bring about its decline.

Bulls for W.A. and Northern Territory.

Hitherto the difficulty of getting fresh blood into the herds of Western Australia and the Northern Territory has been very great, owing to the cattle having to be shipped round the coast. Now, however, that a stud herd has been started on a large scale on Brunette Downs, N.T., only 100 miles from the overland telegraph line, this difficulty should be overcome for those wishing to improve their herds in the far west, especially as the present price quoted appears to be so reasonable.

Wimmera Rye Grass.

A couple of years ago a good deal of prominence was given in Victoria to a newly recorded grass for temporary and permanent pastures, commonly called Wimmera rye grass, and botanically known as *Lolium subulatum*. As the name denotes, its home was in the Wimmera, although it had spread from there to the older settled Mallee country and northern and western districts of the State. It was generally recognised that on farms where established, it provided most excellent summer feed for sheep and cattle. Being an annual, however, and one that seeded freely, grave doubts were expressed as to its controllability. As a matter of fact, there were not wanting farmers who complained that their wheat areas had been considerably reduced by incursions of the grass. Others, again, had nothing but good to say of it, and their view has been largely supported by the experiences of the past two years. Intelligent cultivation of the fallow will, except perhaps in a particularly wet season when working is impossible, keep it in check.

In an article appearing in the Victorian "Journal of Agriculture" of May 1919 *Lolium subulatum* is stated to be a native of southern Europe. It is not recorded as of any economic importance there, so it would appear the Victorian conditions suit it best. It resembles Italian rye grass in being annual, and possessing the general characteristics of the *lolium* or rye grass family. It differs from Italian rye grass in that the awns attached to the flower of that variety are largely suppressed, and also in possessing a long rigid outer glume, which, when the plant is mature, holds the seed tightly.

The stems of young specimens possess the usual purplish base characteristic of rye grass. As the plant ripens, this colour extends to the whole of the stem, the effect of which is to give a very definite appearance indeed to a field of the grass at this stage of ripeness. The leaf-bud in the young plant appears to be cylindrical and rolled as in Italian rye. The root system is fibrous and extremely vigorous, but is not persistent. The grass in the Wimmera and Mallee seeds very freely. The seed is larger and plumper than average samples of rye grass, and is apparently capable of retaining its vitality for several years in the soil, though this point has yet to be proved. Propagation is by the seed only.

The grass is at home on both the black and the red Wimmera soils, though it is stated to do better on the red clays than on the friable black soils, the yields of seed being generally several bushels heavier on red ground than on black. The heaviest growths of all are obtained in low-lying crab-hole country. It also thrives on red Mallee loam and very light sandy soil provided there is a clay subsoil.

During the past two years experiments have been conducted with the grass at Rutherglen, Longerenong College, Nhill, Goroke, and various points south of the Divide. Everywhere in the north of Victoria it has done surprisingly well, and appears to have the power of re-establishing itself annually without resowing. The experience, however, is sufficient to indicate that it might be troublesome in a wet year on farms under-stocked with sheep, or when the fallow is not well prepared. In these cases it is likely to interfere with the yields of wheat, but if sufficient sheep are employed there will be a corresponding gain from them. The interest on capital earned by one Wimmera farmer where the pastures are wholly of Wimmera rye grass compares favourably with that of some of the competitors in the Royal Agricultural Society's farm competition. The area of this farm is 1100 acres, and the area sown to wheat is only 200 acres. In the southern districts the grass has done well on all classes of soil in the first year of its growth. It establishes itself well on friable soils, as at Hamilton, in the Western District, and Drouin, in Gippsland, but appears to grow poorly after the first year on stiff, cementy soils, such as on the western plains at Willaura.

According to the New South Wales "Agricultural Gazette," Wimmera rye grass, growing in a wild condition (without cultivation) in native and other pastures of New South Wales, presents no promising features, and up to 1920 it had never been recommended for fodder. On its Victorian reputation, however, it was thought that it might do

better under cultivation, and experiments were conducted in 1919 at Glen Innes Experiment Farm and at Hawkesbury Agricultural College. In addition, the attention of the department was directed to a 50-acre paddock sown at Finley. Owing to the dry weather the sowing in this paddock was delayed until the latter part of the winter, which is rather late in the year for best results. The seed germinated well, but made very poor growth, and an examination of the paddock late in spring revealed a very disappointing pasture. Most of the plants, which were very small in size, had been completely killed out by the drought and hot weather, while those that had survived were hardly noticeable, so small was their stature. Similarly disappointing results attended the Glen Innes and Hawkesbury trials. In neither did it do so well as other fodders, such as Italian rye grass, nor was it so well considered by the live stock in regard to palatability. The article concludes:—

"It must be admitted that the results during the past year in this State have been very disappointing, and strikingly out of proportion to the results obtained in Victoria. At the same time, it should be pointed out that all the trials suffered from two serious disadvantages: (1) The seed was Victorian grown, and therefore not acclimatised to this State; and (2) it was not possible to sow at the right time (autumn). It is therefore too soon to turn the grass down in New South Wales."

The period of growth is similar to that of cereals. Growth starts from the seed with the first autumn rains, and in the average year the plant may be fed green from April to December, while dry feed is available during the remainder of the summer and well into the autumn months. The growth in the spring is remarkably vigorous. The grass generally flowers about the middle of October, and it evidently pollinates very freely, since it is stated that clouds of pollen may be seen rolling away from any good paddock of the grass about that time. In an average year in the Wimmera (16-inch rainfall) the grass is stated to grow about 2 ft. high, and in good years up to 3 ft. In 1919, on a 14-inch rainfall, it grew about 20-24 ins. high.

It is possible to make excellent hay from the grass, which, when properly cured, is stated to be preferred by horses and dairy cows to oaten or wheaten hay. As compared with cereal hay, there is an immediate response in the milk yield of the dairy cows when supplied with this hay. It is important to cut the grass just after the flowering stage, when it is turning colour, otherwise it will become rather hard and coarse. Besides hay, the grass makes capital ensilage. It proves tough cutting with the binder, and is best cut with a mower. A characteristic property of the grass is to fall down shortly after it is ripe, and this, together with its propensity of firmly holding the grain, enables it to make its own hay, a phrase which is meant to emphasise the fact that the dried layered grass is, until bleached by autumn rains, still excellent sheep feed, because the presence of the grain makes the straw both palatable and nutritious.

The capacity of the grass to seed freely under normal Wimmera conditions is most marked. For instance, in 1917, a paddock of 140 acres at Minyip, after being grazed till August, was closed up and left for seed. An average yield of 15 bushels to the acre of clean dressed seed was obtained, the grass being mowed, stacked, and threshed. In 1918 (14-inch rainfall) a paddock of 180 acres, comprising red and black soils, and which had been continuously down in rye grass for years without being disturbed, was stripped with a modified stripper, and after threshing, a yield of about 12 bushels to the acre of clean dressed seed was obtained, worth at the time 6s. 6d. per bushel of 20 lbs.

Well-corroborated statements set down the carrying capacity as double that of the natural pastures of the Wimmera or Mallee. At Minyip and Warracknabeal one and a-half sheep to the acre can be lambed down on the grass. Further north, on the lighter soils, where the average rainfall is lower, the figure is set down as one sheep to the acre. To those who know the Wimmera and the Mallee, these may seem tall figures, but the appearance of the paddocks and the stock on them certainly seems to justify the statement.

All agree that stock are very fond of the grass, and will leave other pastures for it. The general consensus of opinion concerning the dry feed, however, is that it is somewhat harsh, though when moistened by dew or rain, and a choice of

feed is available, the animals show a decided preference for the rye grass stubbles. It is claimed, notwithstanding, that stock do well on the dry feed until it is spoiled by the autumn rains. Further, there appears to be an absence of impaction trouble as a result of using the dry feed.

Merino Stud Breeders' Association.

Good progress has been made by the Merino Stud Breeders' Association of South Africa, and at the annual meeting, held in Bloemfontein recently, the council submitted the following report:—

Since the meeting held at Bloemfontein last year, the council then appointed has been busily engaged in propaganda work and in making arrangements for starting the association on a sound and lasting foundation. An appeal was made to all Merino stud breeders throughout the Union to join the association, with the result that up to date 92 members have been enrolled. This is not a very large number considering the importance of the Merino industry in South Africa and the number of persons engaged in breeding stud animals; but it is hoped that, when the association gets to work, the number will speedily show a large increase.

Applications for the post of inspector for the coming season were invited by means of advertisement, and the council have pleasure in reporting that they have come to an arrangement with Mr. G. J. Schuurman, who is well known throughout the Union as a qualified judge and competent authority, having held the position of Senior Sheep and Wool Expert under the Union Government.

Apart from the registration of sheep in the Stud Book, there is a wide sphere of usefulness for the association. The favourable results which have attended the operations of various breed societies connected with cattle demonstrate the usefulness of concerted action. There also seems need for some authoritative body, such as the Merino Association, to decide upon the quality of rams and ewes offered for sale as "stud" animals, and to decide whether they are really fit to be classed as such.

Another matter which will have to engage the attention of the association is the appointment or recommendation of judges for agricultural shows. This is essentially a matter which should be taken up by the Merino Association, and your council would suggest the appointment of a small committee to go into the matter and to frame regulations or to submit recommendations.

But the most important work at the moment is to get all Merino breeders in the Union to join, as without such support the association will never become a power in the land, and the council would appeal to all members to engage in propaganda work with the view of attaining the desired end.

Your council has had under consideration the question of registration fees, representations having been made that the present scale of fees might have the effect of preventing registration, and the council recommends for the consideration of the meeting that the fee for rams should remain at £1 1s., but that fee for ewes be reduced to 5s. per animal, and the fee for rejected animals to 2s. 6d.

This is rather a case of the pupil becoming the professor, and it indicates that the South Africans are an enterprising lot.

We know that they are keen buyers, and it may be asked how they can afford to pay such high prices for our sheep when the climatic and pastoral conditions of their country for wool-growing purposes are inferior to those in Australia, and their clips command much lower prices? The answer is that they have great confidence in the future of their wool industry, and their organisation is alive, wide awake and progressive. Unfortunately, it must be admitted that our organisation is moribund, and lacks united effort and co-operative progress. Our leading Merino breeders are doing splendid individual work with their own stud flocks, but they do not co-operate and make a united effort for the general advancement of their industry.

The case is parallel with that of the English manufacturers ten years ago. Their goods were perfect, but their organisation, selling, and advertising methods were out of date. They depended on past reputation. It took a great war to wake them up and induce them to make united efforts for the general benefit of their industry, although long before that it was apparent enough that Germany was capturing their trade with inferior goods.

Another reason why South Africans can afford to pay such prices in spite of natural drawbacks is that their Government gives them every possible encouragement, and takes a

paternal interest in their welfare. Their Department of Agriculture has created a live organisation for extending the sheep industry, and giving it the necessary support.

Here Government is constantly occupied with wild theories of protection, absurd socialistic legislation, and other more direct onslaughts on the industry. The very business that keeps Australia in existence is the target of the politician and the high protectionist. It is therefore easy to account for the enthusiasm and confidence of sheep breeders in South Africa.

In regard to the much debated question of a Merino flock book, some instructive and interesting particulars regarding the flock book association's classification of types of Rambouillet in the United States are contained in the following letter received from an Australian in that country:—

"Shortly after the Rambouillet Merino was introduced in the United States, the flock book association found it necessary to organise three types before the sheep could be properly classified for show purposes, viz., A, B, C. The A type had small wrinkles on the body, the B type had one wrinkle behind the shoulder, and the C type was absolutely smooth with apron wrinkles in front. The A type immediately disappeared, but some breeders stuck to the B type, and the majority cultivated the C type. Of course, the breeders who aim at producing B type will occasionally get a few C type lambs, and the breeders of the C type sometimes get a few B type lambs, but they each have to show these odd sports in the class they belong to. In the sale ring, even in pen lots of twenty-five for ordinary flock rams, the B's and C's are kept separate as if they were distinct breeds. Of course, the C type is far more popular, and it is only a question of time when no B type will ever be shown as rams. Both types, however, have good mutton conformation, and are true to type in every detail, according to the strict regulations of the flock book association.

"Now, with the wool perfect, it would not be a difficult matter for some Australian Merino breeders to improve the conformation of their sheep, and also breed towards greater uniformity of type. Leaving the Tasmanian Merino out of the question as being a distinct breed, it should not be a difficult matter for the rest to be covered by two classes, such as one class for those resembling the Wanganella type, and another for the South Australian. If a third type was necessary at first, have a third until time and the experience of the reorganised association converted the breeders to the advantages of two types."

Fall in New Zealand Live Stock Prices.

There are, no doubt, many farmers in New Zealand who were opposed to the Imperial Government's commandeering of wool and frozen meat being extended beyond the middle of last year, who are now much wiser men. The end of the commandeering was, according to them, to see prices still further advance, but the results have been quite the opposite. The wool sales in the Dominion opened below commandeering prices, but on the whole were accepted with fairly good grace by those who were more in favour of selling than holding. But with the withdrawal of American competition, the sagging British market, and no continental outlet to speak of for the Imperial Government's accumulated supplies of wool, the local market has gone from bad to worse during the past three months, until now wool is practically unsaleable at any price.

The frozen meat season opened with a keen demand for lamb at very high rates, and with a fair price for mutton, and little or no demand for beef for export. The failure of the American market as an outlet for New Zealand lamb, for which it is said the early purchases were made, the re-shipment of New Zealand meat from New York to London, and other factors that have depressed the Home market for frozen meat, have practically put a stop for the time being to further purchases of stock by the export companies in New Zealand.

The collapse of the wool and meat markets has therefore resulted in the most serious fall in the value of live stock

that has taken place for many years. On an average it may be said that a decline of 50 per cent. is well within the mark for medium to good quality sheep, both fats and stores, while the drop in inferior and aged sheep is much more. At the autumn fairs in Canterbury young ewes that last year went over 50s. per head could in only odd instances reach 30s. this season. The decline is a very serious matter to sellers, but at the same time there is the other side of the case, and that is that buyers of store sheep have been able to stock up at unexpectedly low rates, which a recovery in the meat market, if not in the wool market, must bring them out on the right side. Fat cattle have declined about 30 per cent.; store cattle can only be disposed of at very low prices, and although dairy cows are worth less than at this time last year, their real value can only be ascertained later when it is seen how next season's market for dairy produce is likely to rule.

Hopes are being entertained that the meat market will improve before the end of the year, but the wool position is looked upon as likely to remain unsatisfactory while the Imperial Government hold such large stocks. The collapse of the markets for two of New Zealand's staple products has naturally caused a feeling of depression in the country, and it is being accentuated by the firm way in which banks, financial institutions, stock firms and others are retaining their hold upon their finances. The dairy industry, and a good wheat crop (which covers but a limited area) are the two classes of production in which satisfaction is felt, and the former will go a long way this year to make up for the country's loss in wool.

Meanwhile everyone, from the Government downwards, is urged to practise economy, and labour will have to learn its lesson from the decreased wages fund. There are already indications that there may be unemployment to face, but so far there are few men out of work, except those who have no one to blame but themselves. The fact is that New Zealand has been about the last country to feel the effects of the war, because of the prosperity of the past six years, due to the high prices of her exportable products, and the turn in the tide has come suddenly by the failure of the markets. There is no need for alarm, but the country must accommodate itself to the changed conditions.

"Aphis" Disease.

Dr. Sydney Dodd, of the Faculty of Veterinary Science, Sydney University, writing to us in regard to some wool samples we had forwarded him, sends the following opinion. The wool in question had come away from the skin of sheep pastured on the Darling Downs, Queensland. The trouble might have been due to dip scald, through not drying recently dipped sheep in the shade, but Dr. Dodd considers it is due to the complaint commonly called "Aphis" disease, of which he has made a close study. He says:—

"The history and the appearance of the sample of wool indicate that in all probability the condition results from feeding on trefoil, combined with the chemical effects of the sun's rays. Trefoil is one of the so-called skin sensitising plants, and contains a principle which, after it has been eaten, although not poisonous in the ordinary sense, renders the skin very sensitive to certain of the sun's rays, so that exposure to the latter causes great itching, and some inflammation of the exposed parts. The animal often renders the parts worse by rubbing and biting in order to allay the irritation. The wool is affected, as shown by the samples forwarded, but as noted, only in patches. Parts not exposed to direct sunlight are not affected, and, strange to relate, neither are the parts of the skin which contain pigment, only the pink parts or unpigmented skin being affected. The condition is known in New South Wales as 'Aphis' disease, because stock-owners thought it was due to aphis getting on the skin. My researches, made a few years ago, and published in the 'New South Wales Journal of Agriculture,' showed conclusively that aphis has nothing to do with the condition, but that it is due to feeding on trefoil, in conjunction with sunlight and unpigmented, or pink skin. These three factors must be present or nothing harmful results."

Letters to the Editor.

Sheep's Health and the Blowfly.

To the Editor.

Sir,—In your issue for March what Mr. Reid writes re blowfly shows that he evidently has not had much experience with the pest, and does not know what an epidemic of blowfly means. Here for periods during the last two years they could be seen in millions all over the ground. At one carcass, poisoned with arsenic water, I'm not exaggerating when I state that the ground for fully 15 ft. round the carcass was green with dead flies, and close to the carcass they were fully two inches deep.

Spraying the sheep would not cure fever. This our sheep did not have. Does he think for one moment that any ordinary sheepman marks his lambs without sterilising his knives and instruments, or marks on dirty rails? The rails in our lamb-marking yards are renewed every season or painted with lime. Does he think we use dirty saddle cloths, or does he think our sheep are not given salt when required? From his remarks one would think my letter was written without any knowledge of the subject. Has he seen fat, healthy wethers blown a week or two off shears, or has he seen lambs marked, in recent years, without being dressed? We have to dress them even in the winter time, and I can safely say that 50 to 70 per cent. of the stations marking lambs last September and October had them blown, and had to attend to them, i.e., stations in this district. Taken as a whole the Queensland sheep are the healthiest in Australia, yet plenty of stations lose 10 to 20 per cent. of their sheep from maggots, and blood poison following.

Mr. Reid states that the feed must have been ripening, and this change in diet benefited the ewes I jettied. This has nothing to do with it, because in every instance the ewes were mustered and yarded one day, jettied and let back into the same paddocks the following day, one day being too short a time to make any difference, as far as the sheep are concerned. When he says he does not think we get special waves of blowflies this statement only proves what little he knows, as it has been proved and seen time after time in this district. I think a sheep poor and weak from starvation is more likely to get struck than a strong, fat, and healthy sheep off good feed. I notice he admits having seen jute goods blown by the fly, surely these were not fevered.

Perhaps some other interested will take the matter up. I know that where the sheep were not sprayed heavy losses occurred, and had we not attended to ours we would have lost likewise, this proving that spraying saved lives, and was not likely to make the sheep any more healthy than they were. The fly attacks ewes, wethers, rams, and lambs indiscriminately, and does not look for fevered or unhealthy animals. It does not say much for the medical profession, and certainly would look very funny if doctors had to diagnose fevers by the flies round the patient.

Why all the experiments at Dalmally and other centres and all the money spent if it is only a matter of health?—I am, Sir, &c.,

BOYD LINTON.

Mount Abundance, Q., 1st April, 1921.

To the Editor.

Sir,—The letters written under the above heading in your January issue by Mr. S. L. Reid, and February by Mr. B. Linton, are very interesting. I entirely agree with Mr. Linton's views. If Mr. Reid's contention "that the sheep must be unhealthy to be struck by the fly" be the case, then from 80 to 90 per cent. of sheep in some flocks must be unhealthy at times, which is hardly possible and highly improbable. I think with Mr. Linton that the result of the attack

of the blowfly causes the fever, and not the reverse, as contended by Mr. Reid.

Unquestionably a sickly sheep will attract the fly more readily than a healthy one. But we find the healthiest of sheep struck. A "straight" woolled is not so susceptible as a wrinkly. A ewe is more susceptible than a wether, and here I may say that I think the cause of so many ewes being struck (lambling time excepted) is bad shearing. The "spout" is cut by the present-day shearers, and the result is that the urine drips down on to crutch, &c., instead of being sent clear away, and that continuous moisture attracts the fly when he is about.

The best dressing to use on fly-blown sheep (after clearing wool away), and also to prevent further attack, and for use on newly marked lambs to heal and prevent fly blow is an interesting subject, and the views of your many correspondents would be educational. Personally, and after having tried many, I think there is nothing like an equal proportion of Stockholm tar, kerosene and castor oil for blown sheep (badly blown), and for lamb cutting more kerosene and less oil. For the flock (the ewe portion) I have had good results from dipping two months "off machines," drying thoroughly in shade, and crutching before shearing. The dip mixture used was Cooper's. Mix it very thoroughly and dry in the shade for best results.—I am, Sir, &c.,

GEO. H. STUART.

Dagworth, Winton, Queensland, 21st March, 1921.

Bone Weakness in Lambs.

To the Editor.

Sir,—From your correspondent's remarks in March issue it would appear that the soil upon which the lambs are being reared, or upon which food is grown that is given to them, is deficient in phosphatic and ammonial salts. Roots, hay, &c., grown on such soil and exclusively supplied to healthy sheep have been known to produce this trouble, although sheep were running upon soil rich in these quantities.

I would suggest that your correspondent have samples of soil analysed, and a top dressing of lime and phosphate or other fertiliser applied to stud paddocks to make up deficiency as indicated in analysis. A salt lick containing not less than 15 per cent. bonemeal and lime should be kept where lambs can get easy access. When lambs are given artificial food care should be taken to provide a properly balanced ration, and if hay or chaff grown upon poor, sandy or gravelly soil is used, concentrates rich in protein and mineral salts should be given with it.

A salt lick containing calcium phosphate and lime, or bonemeal and lime, should always be provided for breeding and growing stock, more especially upon country deficient in lime and phosphate. This enriches the milk of dams and keeps the offspring healthy, increasing bone and vitality, thus enabling them to stand forcing as they get older, or, if not forced, to grow into bigger and better animals.—I am, Sir, &c.,

H. C. CARTER.

Mooki Springs, N.S.W., 4th April, 1921.

Corriedales.

The Wool Standard.

To the Editor.

Sir,—Mr. Van Weenan, in the "P.F.A. Quarterly" for March, has given a fairly accurate account of the origin of most flocks, but he seems to have omitted to state the fact that in New Zealand and in the Commonwealth there are many Corriedale flocks of Lincoln-Merino origin which have had no other blood introduced, and that no matter what the origin of flocks otherwise founded, that blood has, in nearly if not in all cases, been since introduced.

The unevenness of exhibits at the sheep shows is accounted for by the fact that a proper wool standard has not, so far,

been adopted, and individual breeders aim at their own ideals. The present range of 46's to 56's may have been desirable while the breed was being developed, but it allows too much variety, and the sooner the standard originally aimed at is adopted the sooner we will have an even type of sheep. This quality of wool is described by experts as 50's to 56's, and many of our old established flocks are now within that standard.

Environment has no doubt a considerable influence on a clip, but if this is not counteracted by judicious selection and mating, and a fixed type adhered to, the breed will drift into many classes, as the Commonwealth Merinos have done.

To get large-framed sheep some breeders have sacrificed the quality of the fleece, while others to maintain the latter, or improve it, have sacrificed the carcass, but the Corriedale should undoubtedly in size and wool represent the first cross between the Lincoln and the Merino. Where the foundations were laid either from fine or strong woolled sheep of those breeds, it would certainly make a difference in the wool produced, but the range of 50's to 56's is ample to enable all Corriedale breeders to produce sheep of that description, and, for stud purposes anyhow, this standard should be adopted and adhered to. Those who advocate a lower or higher grade of wool than this should very carefully watch the trend of their flocks to either extreme.—I am, Sir, &c.,

D. MACFARLANE.

Eurella Estate, via Rylstone, N.S.W., 21st March, 1921.

The Strike Evil on the Land.

To the Editor.

Sir,—Your leading article in the January Review is very much to the point, and there is no doubt we must have co-operation to successfully combat the strike evil on the land.

But might I please ask why your suggested insurance scheme is necessary? It seems to me that if the Graziers' Association could be developed into a big co-operative association, with the full support of all the pastoralists behind it, the strike evil could very soon be eliminated altogether.

The one co-operative branch this association has tried, viz., The Graziers' Co-operative Shearing Company, with its record of 110 sheds last season in the face of a big shearers' strike, has shown what is possible to be done in this line.

We have plenty of strength in our ranks, and if this company were given the support it deserves so that it could guarantee to stick to the men it employs, it would not be troubled much more with strikes. Practically all the labour it requires could be recruited from the farmers and farmers' sons—from men who realise that their interests lie much more with producers' associations than with Sydney red-rag controlled unions, but who are afraid to break away at present whilst unionism holds such sway.

With the pastoralists organised into a solid body to support their own societies there is no reason why the Graziers' Association, having been successful in one branch, should not go on to form other co-operative branches.

For instance, it could handle the wool from the shed to the railway, or even to the ships if necessary.

It could form a Co-operative Station Supply Company, &c., doing all the work, as the shearing company does now, at just actual cost, plus a small overhead charge for office expenses.

Thus strikes could be done away with, I think, and the man-on-the-land's position made more secure. Of course, complete co-operation means intense organisation, and I realise how hard this would be to carry out, but I think it could be done if the scheme were commenced at once, whilst the graziers are still so much up against it, as there is nothing like adversity to make men get together for their common good.—I am, Sir, &c.,

R. C. WILSON.

Wyaldra Park, Mudgee, N.S.W., 3rd March, 1921.

[We quite agree with all Mr. Wilson says, but it is doubtful if in the event of a general shearing strike, any single

organisation would or could be large enough to meet the urgent requirements of growers all over the country without incurring loss if they elected to stand out against the strikers' demands. This is where a compensation or insurance fund would prove useful.—Ed. "P.R."]

Wild Dogs.

To the Editor.

Sir,—You must be tiring of this subject, but forgive me for encroaching again on your space, to answer my two assailants' February issue on the wild dog question.

First I will answer Mr. Rodier, who asserts that rabbits are destroyed by his method. Well, if that is so, why does not Mr. Rodier prove his words and not keep repeating an assertion that carries no more weight with rabbit-haunted landholders than an advertisement setting out that Indian Root Pills will dispel "that full feeling after eating." Let a snug little island, Mr. Rodier, say 50 acres, where there are no rabbits, then import a number and watch. If your statement is proven "I dips me lid." Mr. Phillips, please read the above and also what follows.

First let me say I am profoundly pleased that you have written a lengthy letter to the chairman of the Western Division Progress Association. The association is a live wire. You, like my other adversary, claim that with eradication of rabbits, which is quite easy, destruction of wild dogs would naturally follow, although this would be more difficult.

But you have never told us, Mr. Phillips, how you propose killing the rabbit. Is it a secret method? If by natural means, explain them.

I must ask you to be more explicit and give proof. We do not accept bald statements.

Nos. 2 and 3 I answered before.

No. 4 brings us back to my answer of No. 1. What is your method of rabbit eradication?—I am, Sir, &c.,

JIM PARKER.

Tordown, Menindie, N.S.W., 19th March, 1921.

Making Bush Hay.

To the Editor.

Sir,—Years ago we had wild oats 3 to 4 ft. high over thousands of acres, and I was keen on converting as much to hay as possible. I secured three Massey Harris 6 ft. mowers and cut 800 acres in no time, 45 acres a day. I got a waggon loader from the same firm, a marvel of a machine, which lifted the hay cut on a width of 22 ft. after being concentrated to 6 ft. by a side delivery rake, also a great success. The waggon loader is hitched on the perch pole end of the back of waggon, lifts the stuff up (while horses walking as slowly as possible) as fast as, or faster than four men can handle it on a 15 ft. square frame. It loads 30 cwt. or more of dry stuff in ten minutes, or over two tons of green stuff in five minutes. This plant I should say is worth anything on big places.

The loader lifts the stuff off the ground very cleanly and evates it about 10-11 ft. I got the plant-loader too late and put more than 200 tons of hay up that year (1915), but it is the hay) was invaluable in 1919-20. I'm not an agent or in any way interested, but the Massey Harris people are worth consulting by graziers who desire to carry out the same I write of.

This bush hay must be thatched or covered with straw or hay covering, for after a year or two it will not turn the other way off. A good way would be to thatch with the grass or hay itself, I should say. No expert hands are wanted for the machines.—I am, sir, &c.,

HERBERT H. WETTENHALL.

Carr's Plains, via Stawell, Vic., 31st March, 1921.

Sheep Manure for Intense Cultivation.

To the Editor.

Sir,—What is wrong with sheep manure for intense cultivation?

I recently advertised in the irrigation area, Murrumbidgee, that I had about 500 cubic yards of sheep manure, half a mile from river bank (navigable), 2½ miles from a railway siding, 60 miles from Yanco, to be had free, gratis and for nothing, and there must be many other stations with wool-sheds on navigable rivers and railway lines only too glad to be rid of the manure from under the battens.

It pays to ship "guano" thousands of miles from the islands, yet I did not get a single inquiry for above. It is still there if anyone wants it.—I am, Sir, &c.,

"BACKBLOCKER."

Riverina, N.S.W., 24th March, 1921.

Cattaloes.

In 1894 the first properly organised experiments were made in crossing domestic cows with American buffaloes. In that year the late Mr. Mossom Boyd, of Ontario, Canada, put a pure buffalo bull to a number of domestic cows. He continued the experiments until the time of his death in 1915, calling the offspring of the first cross hybrids, and the product of two hybrids "cattalo." As a result of his eleven year's work he left a herd of about 20 hybrids and cattaloes, which were bought by the Canadian Government. They were first sent to an Experiment Farm at Scott, Saskatchewan, and later transferred to Buffalo Park, Wainwright, Alberta.

The main object of this cross was to breed a type of stock that would combine the hardiness of the buffalo, specially in regard to foraging on the plains in the severe northern winters, with the general utility of the domestic animal. The result to date seems to point to this being obtained to a large degree. In the first place, the thick and close hide of the buffalo has been carried to the second cross, which will enable the animals to withstand extreme cold. Secondly, cattaloes appear to inherit the ruggedness of the buffalo. They will face a storm and do not drift like domestic cattle, are good in rough country, and so far have not developed any infectious disease. Thirdly, they are good doers, and thrive on poor pastures, though it is acknowledged that the dressing percentage and quality or quantity of the beef cannot compare with prime steer.

In the past considerable difficulty in breeding has been encountered owing to the violent first cross. There is a natural antipathy on the part of the buffalo sire to the domestic dam, unless they had been brought up in close association with one another. A high percentage of the calves of the first cross were born dead, and not infrequently the death of the cow followed. It used to be thought that this was caused by the high shoulder peculiar to the bison calf, but that does not appear to be the case. The first cross hybrid males are rarely fertile, but the females commonly so. Of the latter, there are at Buffalo Park fourteen proven breeders; of the former, two. It is hoped that the problem will eventually be solved by the use of true cattalo bulls.

The many changes of quarters to which the herd has lately been subjected has, doubtlessly, been detrimental to the progress of the experiment. The year 1919 proved to be the most successful season up to date. The cross of hybrid and cattalo cows with bison sires was discontinued, and the services of a pure-bred Hereford bull were requisitioned with good results. Other sires were a very fine hybrid buffalo known as Huron, and yaks, who cross readily and safely with domestic cattle. The yak comes originally from the plateaux of Central Asia, and is zoologically the connecting link between the bison and cattle. He is about the same size as the Aberdeen-Angus, usually black in colour, though sometimes white or brown.

Motor Notes.

By "GNOME."

This month it is my intention to deal at some length with an evil that affects more closely the motor car owner than probably all the blowfly pests in the whole of the country. In fact, there is a chance of fighting plagues, whilst there is at present no form of "disinfectant" to cope with the motoring evil that is in our very midst. The "parasite" that I am referring to is the Motor Garage Pirate, the Buccaneer that is armed with a "hammer and spanner," and who makes you, as the car owner, walk the plank of impecunious regret.

Without doubt the majority of motor repairmen are honest enough, but amongst the balance are to be found unmitigated and frank pirates. There will also be found among the same crew those who through sheer ignorance are not aware of their misdeeds. As for the pirates themselves—well, the very ghost of the famous Captain Kidd must turn in its grave green with envy. Now you gentlemen as motorists are a great deal to blame in this matter, because these buccaneers of the hammer and chisel sum you up at once as being ignorant so far as running repairs of the car are concerned, or that you cannot be bothered with the burden of a little knowledge concerning your car. And so Captain Kidd grasps this as one of his chief assets, and works it for all he is worth. This is what generally happens, as some of you are aware. Your knowledge of your 'bus carries you just far enough to warn you that something is wrong, and in consequence the machine is run round to the pirate's stronghold to be rectified. In so doing you explain the symptoms to the best of your ability, saying as you leave the place that "I will leave it all to you. Fix it up the best way you can, and ring me up as soon as it is right," and out you go. Now, in doing this you are really issuing what one may term a "blanket order," which in itself is an open invitation to be robbed by an unscrupulous man. If you were only more conversant with the innards of your car, then all you would have to do would be to say, "Fix so and so and such and such a thing," and see that it is written down, or, better still, have a list made out and signed by yourself. At the same time it is a good idea to get a rough estimate of the cost beforehand, and have this also added to the list as a "rough" estimate, and have that signed by the foreman or the owner of the garage.

Another little stunt that some of these men get up to is to make a diagnosis of a simple trouble, taking no end of time over it, and then charging more for the diagnosis than for the actual fixing up of the job. And so by having everything drawn up beforehand the charge for the locating of the trouble is very often obviated. Another point also is that the honest man will think very much more of you for having a grip on things, and he will feel that there is no opening to take any liberties, and also he is relieved of a lot of responsibility.

To give you an idea of what I am trying to drive at, the following example may be of interest to you. A man living up in North Queensland had his car sent down to us six weeks prior to the opening of the annual show. The 'bus was a Talbot, and a rattling good one she had been, too. Prior to the arrival of the car, we received a covering letter stating that the car was to be overhauled, and mentioning the time that he would be down in the city, but not stating the date he expected delivery. After giving the engine a test run over my favourite route when she had been taken off the boat, included amongst the items on my ingoing workshop report were the following:—"Roaring differential; bad backlash between gear-box and road wheels; worn steering joints; fierce clutch; chattering magneto drive; dirty engine, with poor compression on No. 1 cylinder; closely examine rings on same, as distinct sound of blowing on turning handle; thoroughly examine bearings." Now, that was my

report made from the outside, but as the letter stated an overhaul, then, of course, if the foreman found anything that I had not been able to locate, he was at liberty to add it to the repair sheet. Well, off to the workshop she went, and a couple of weeks later in walked our friend the owner. It was just my beastly bad luck to be the first member of the staff to be dropped upon by him. "Hullo, Ole Son, how goes it?" was his first shot. And after the "custom of the country" had been fully observed in a manner that only those men of the north know how, he said: "Is my car ready?" "Ready!" was my ejaculation. "Great Scott, man, do you think that all we have to do here is to press the button to rectify all the trouble that it has taken you twelve months to do chasing brumbies? Come up to the workshop, and we will have a talk to the foreman, and see what he thinks about it." We took the lift up to the top floor, and, stepping off, my friend found his chassis standing on four boxes with only the gear-box and steering column attached thereon. Even the front axle had been removed, as that was found to have a "kink" in it also. Turning to me with blind fury written all over his face, he blurted out at the top of his voice, "You're a lot of d— robbers. All that car wanted when I sent her down to you was the cleaning of the cylinders, valves ground in, and a leak in the radiator seen to. Why here it is in my notebook. Before writing to you I made a point of going round the car and making a list of what I wanted done, and I am mighty glad I did, too, as this will be put in as evidence against you, you low down lot of thieves." "Well," was my comment, "why didn't you mention all those facts in your letter to the firm?" "I told you what I wanted, and now you are doing all this work. I suppose the 'bus is about ruined now, and the best thing I can do is to sell it." "Well, we are doing just exactly what you said you wanted done in your letter, and that was an 'overhaul.'" And there we were. Taking him down to the office we showed him a copy of his own letter, and there was no getting away from that fact.

But it was a very trying morning nevertheless in more ways than one, as it took many trips across the road, and likewise many "spots," before the great big heart of that northerner was brought back to its normal "revs." Now, looking at that instance from the view point of the repairman, one can safely say that that letter and car had got into the hands of a normally honest motor firm. And so just imagine how much worse would the case have been if the car owner had patronised one of the Captain Kidd crew! To such a member of Motoring Society a "blanket order" such as this one really was was almost as good as offering him your cheque book. He would then render an account that could easily be multiplied four times, and then diluted with a dash of imagination just to add a little flavour to the rendering as it were!

In all probability you have seen signs stuck up in garages that read something like the following:—"Protect our good name. If you are not satisfied with the work done and have a kick, tell us, not your friends; and if we cannot cure the trouble then kick us." But there are many instances where one could easily replace those signs with something after the following:—"All hope abandon ye who enter here," or to touch on Will Shakespeare, "All places that the eye of heaven visits are to a wise man ports and happy havens"—bar this one. To the wise and otherwise, keep out." But, joking apart, to make the majority of these garage signs mean justice to the car owner, there should undoubtedly be a previous agreement as to what work it is necessary to have done, and an estimate signed by the foreman, as before mentioned, giving as closely as possible the approximate cost of the job when completed. Two good repairmen known to me follow out this system, and they both agree that it is the only one and satisfactory method, leaving nothing to the imagination of the owner of the car or to the inclinations of the costing clerk in the office. Just so much work has to be done, and just so much will be the charge, which is fair enough to both parties, is it not? Touching upon this point in connection with the costing of work to be done, a letter reached me not so very long ago from a reader of this paper living in New Zealand.

He is the owner of a Vauxhall, Prince Henry 1914 model, and from his excellent description of the trouble it appeared very much as if one of the cylinders was so badly worn as to necessitate reboring. I got in touch with one of the two repairmen just referred to, and got a quote from him as to the cost of reboring a complete set of cylinders, 95 x 140 mms. bore and stroke, a new set of pistons with rings complete, and a complete set of gudgeon pins. The exact cost for the minute has slipped my memory, but it was somewhere in the vicinity of £35. Of course, on top of that he would have freight both ways from New Zealand, and the cost of packing, no small item these days, let me assure you. What my correspondent has thought fit to do I have not heard, but the quote gives him a chance to compare with the prices given him by the good repair merchants of his own country. Though I very much doubt if there is a repairman in the whole of the continent who can touch the man who gave me the quote, so far as workmanship is concerned.

Now, compare this with a job that has recently come under my notice in the same city. Only a few days ago a letter reached me from a correspondent asking me if I thought the following a fair charge. He owns a Vauxhall, 1914 model—funnily enough—which for some time had been gradually falling away in power. He consulted a friend of his who is supposed to be quite an expert as an amateur motorist, and the friend pronounced at once that the trouble lay in worn cylinders. She "wanted reboring," he said, and so acting under advice of another friend, he put the 'bus into a workshop in his own suburb to have the cylinders bored, new pistons made, with rings to match and new gudgeon pins. Finally, out she came with about as much power as there is in a new-born babe. "Oh, you wait until she has done a few hundred miles," was the optimistic comment of the man who did the job. Well, the owner has waited and waited, and instead of getting any better she is rapidly getting worse. "The point that gets me, though, is this," writes the victim of this lineal descendant of Captain Kidd, "this repairman asked me to wait until she had done a few hundred miles, but he did not wait until we had done anything like 200 before he sent in his bill to me, which amounts to £96. Do you think that I am justified in paying it?" Whew! Gee whiz! Some friend that, what? Cheap advice from a "boosted" friend does not always pay; at least, that is my experience of these same gentry. But £96 is absolutely the dizzy limit, and just about caps the best bit of hammer and chisel robbery that has come to my notice, though I have a good one that will keep for a later date.

But there is not the least doubt that a great cause of woe in the repairing line is that caused by the ignorance of many repairers in regard to their own business. Here is an instance which is really a daily occurrence. The owner of a 20-h.p. American car, fitted with a high-class high tension magneto, had had misfiring trouble at low speeds when running on top gear. Taking it to a city garage they decided that the trouble lay in the carburettor, and so this was adjusted at some length and after some trouble. But still the misfiring persisted. The plugs were then removed, and a complete new set fitted in their place with still the same result. Finally, it was decided that the joint between the carburettor and the induction pipe required renewing, and so a new gasket was fitted and the owner informed that he could drive his car home from the office that night.

The car returned to the garage the following day, still suffering from the same disease, and so the make and break of the magneto and the carburettor were readjusted, with a better result. But both adjustments having been made at the same time, the mechanic who did the job was at a loss as to what adjustment had made the improvement! However, the 'bus was handed over to the owner, who promptly returned it the next day with the assurance that if they kept at it long enough they would find the trouble, as there was a decided improvement over the last few "cures" that had been effected. He was a humourist. Many more gadgets were tried, including a new carburettor, but instead of getting any better the thing got worse. In sheer disgust he gave the garage folk up as hopeless, and that night, in talking over the 'phone to a friend, mentioned what a "rotten spin" he

had had at the hands of the Garage Pirates. Funnily enough, the friend had experienced similar trouble on his car, which was of a different make, but carried the same form of ignition. He had taken the car to a smart electrician, who had diagnosed the trouble as a weak magneto. Taking the address of this man, he ran the car round the following morning, and had her back the next day as sound as ever she was. In the meantime every trip to the former garage cost the owner money in plugs, gaskets, and time, all for a job that cost him one-fifth of the time and money spent with the first people.

Well, time and space will not permit of much more on this question this month, but there is still more to be written on the subject, and as it is really a point of vital importance to all users of the self-propelled vehicle, one feels that he cannot write too much on the subject, and so we will leave it to return to the attack at a later date. Till then, au revoir!

Coastal Survey by Aeroplane.

It is a well-known fact that at the outbreak of war in 1914 no country in the world was so little prepared for aerial defence or offence as Australia. It is true that there was an established military flying school at Point Cook, near Melbourne, but this was equipped with such antiquated types of aeroplanes that if an eagle had got it into his head to attack one of these buses in the air disaster would have followed the aeroplane to earth.

The instructors themselves were even lacking in experience, as was shown when Mr. Lebbeus Hordern, of Sydney, presented to the Defence authorities his Maurice Farman seaplane at the outbreak of war. This machine accompanied the Expeditionary Force to New Guinea, but was never flown. The only two pilots who could handle it at the time were the late Maurice Guillaux and Mr. Hordern himself. And so the machine stood at Point Cook for years on end, until probably to-day she is "written off."

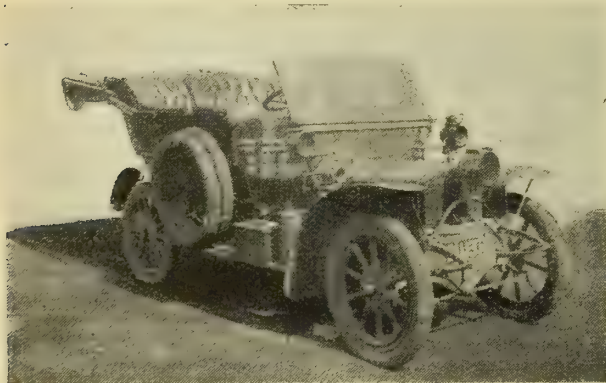
But since the 8th May, 1914, the day Guillaux and Mr. Hordern rose from Double Bay in the Farman, much water has passed through Port Jackson Heads. Extremely keen on flying, the owner purchased the seaplane as a sporting venture, but now, after several years of war, Mr. Hordern has returned to this country firmly convinced that the future of Australia's safety lies largely in the seaplane and flying boat, working in co-operation with the navy. In view of this contention, it is rather startling when one realises that to-day Australia takes about last place in the world's aviation statistics, and so far as the Government is concerned, it looks very much as if the country could remain in this position until after the next war. So far, all the pioneering work has been left to struggling aviation companies, who are composed of returned men, plus their hard-earned cash, and who have eked out an existence without any assistance from the Government whatsoever. Of course, Great Britain is in a similar fix, recent cables having informed us that owing to the French Government subsidies, the British air-mail carriers are closing down, as the French firms are able to cut the rates excessively.

Returning to Australia, we again find that private enterprise has had to come to the rescue, and recently one of the most interesting and enterprising expeditions of its kind sailed from Sydney Heads en route for Tasmania and New Guinea. To those who know their "Oceania," this may sound somewhat Gilbertian—Sydney to New Guinea via Tasmania—but when it is understood that the object of this expedition is to make an aerial survey of the coast of Tasmania and then up the east coast of Australia to Papua—the coastline of which will be thoroughly surveyed and photographed—then one realises the enormity and the importance of such an undertaking. The prime mover in this enterprise is Mr. Lebbeus Hordern himself, who is the managing director of his own little show, the Aerial Company Limited, Sydney, and who will present the result to the Defence authorities. Having purchased two 3-seater Curtiss "Seagull" flying boats, one 10-seater Short twin-engined flying boat.

and a Short sporting seaplane, Mr. Hordern decided to equip a schooner to act as "mother ship" to his flotilla of air craft. No expense has been spared, and probably the little vessel—registered as the "Acicelle"—is one of the most up-to-date of her kind on the coast. She is seventy feet long, is fitted with a 45 h.p. engine capable of steaming at 9 knots, and carrying a crew of seven, all highly efficient and returned men. Included among the modern appliances on board is an electric lighting plant, and one of the most up-to-date dark rooms that is conceivable for photography.

The idea is that the "Acicelle" will go ahead along the coast in 150 mile stretches. The pilot of the "Seagull" ("Gnome," of this paper) is then wired to by the skipper (Captain C. W. Snook) of the "Acicelle," advising him what vicinities are to be photographed, and the "Seagull" then takes off and follows. In the meantime, data of harbours, alighting points, &c., have been gathered by the schooner. It will be seen at a glance how invaluable such data will prove to a nation, though this may not be realised until the outbreak of the next war.

Mr. Hordern is to be congratulated on the spirit he has displayed in what is really a grand and big thing, and what must prove in the future to be a national asset. Britannia rules the waves with her warships, but as these are times of "under-sea" and "up-in-the-air" fighting, it is up to the nation to put her best foot forward to maintain the supremacy of the air. Some photos of Mr. Hordern's fleet appear in the illustrations this month.



A 10 H.P. 2 CYLINDER ROLLS ROYCE.

Recently presented to the Rolls Royce Company by its owner, Mr. S. J. Gammell, who purchased it about 14 years ago and has run it ever since, covering over 100,000 miles.

The Post-war Austin.

In our report of the Sydney Motor Show we omitted to refer to the Post-war Austin, a car which has a special interest for the man on the land on account of personal relationship. It is generally known that Sir Herbert Austin, head of the Austin Company, is also and has been for many years head of the Wolseley Sheep Shearing Company. A further connection is that Sir Herbert Austin learned his profession of engineer in Melbourne, and for some years was engaged in Goldsbrough, Mort and Co., Sydney.

The new post-war model has been designed with a keen idea of the requirements of the Australian user. It has ample engine power, as a result of which the gear changing is reduced to a minimum. It has big radiator capacity, thus ensuring cool conditions under the most trying climate variations.

The springing is another feature that attracts attention with those whose business it is to travel the uneven surface of western roads, and certainly no car at the show had better rear springs than the Austin. During the show a seven-seater Austin was selected by a well-known Goulburn (N.S.W.) pastoralist, who had already had six months' experience with a five-seater of the same type. Austin owners who visited the stand gave evidence of their satisfactory experience with the car under the conditions existing in their various districts.

Export Market for Canadian Cattle in Jeopardy.

Mr. W. F. Stevens, secretary of the Live Stock Growers' Protective Association of Western Canada, writes us:—

The cattle men of Western Canada are deeply concerned over the prospect of having a high duty placed against their cattle entering the United States. For the past seven years Canadian cattle have been admitted free of duty into that country. This fact, combined with the large demand for beef during the war, led to an increase of 34 per cent. in the cattle population of the Dominion, and to an increase of approximately 75 per cent. in the provinces of Alberta and Saskatchewan, in spite of the fact that in Alberta alone 3,141,623 acres, most of which had previously been used as grazing land, were ploughed up and devoted to the growing of grain.

To-day, the Western Canadian "cowman" is threatened with practical exclusion from the United States by means of a high tariff. His animals are now excluded from Great Britain by an embargo, and the geography of his country is such that he cannot successfully export his product in the chilled state, while the long period of winter feeding makes it impossible to produce beef at a price that would justify him in freezing it and exporting it in that condition.

Western Canadians are often urged to follow the example of the Argentinians, and put their product on the British market in the chilled state. Those who make these suggestions close their eyes to three important facts. Western Canada has a much greater capacity for growing cattle than for finishing them, consequently, if her cattle industry is to thrive she must have a large and dependable market for stores in the autumn.

Eastern Canada, which is devoted largely to dairying, will not absorb the surplus stores grown in the west. If these stores are finished and slaughtered in the west the carcasses will have to be transported from 2000 to 2500 miles in refrigerator cars. This journey will require at least six, and in many instances, eight days. During the winter months when the mercury frequently registers 20 degrees below zero (Fahrenheit), and sometimes 40, and even at times 50 degrees below zero, the beef would be sure to become frozen en route, and would have to be sold at a lower price on that account. During the summer months it would become soft and streaked, and "go off" in flavour for that reason, consequently there would be only a short interval in autumn and spring when one might hope to place beef killed in Western Canada on the British market in prime condition. No one could conduct a business under such conditions and hope to succeed.

The question is sometimes asked, "But why not finish your cattle in the west and ship them to Great Britain or to the Atlantic seaboard alive and slaughter them there?" The answer is that the more nearly the animals are brought to that state of finish that would be required to qualify the beef to go into a high-class British trade, the less able they would be to endure the hardships of the 2000-mile journey across the continent. Many would become weary and lie down in the cars. They would be tramped upon to such an extent that all would be badly bruised, and some would die. Our store cattle, which come off the range in autumn hard of hoof and firm of muscle through being on their feet a large portion of the time in search of food, and travelling long distances to water, stand the journey very well; finished cattle do not, hence the difference.

The foregoing facts explain the reason why Western Canadians are so insistent upon Great Britain making good her promise to them during the war, namely, that upon the restoration of peace, justice would be done to Canada, and the embargo against her cattle would be removed. They agree that the maintenance of the embargo not only retards development in an important colony which on numerous occasions has demonstrated its loyalty to the Crown, but that it is unfair to the people of Great Britain themselves, in that it reduces the number of opportunities for British working men and artisans to secure employment at home as herdsmen, butchers, tanners, &c., and the British consuming public are prevented to a much greater extent than need be from gratifying their preference for home-killed beef. (Cable advice states that a commission is to be appointed in Britain to investigate the question of the embargo, which will be withdrawn if it is found that there is no danger of disease.—Ed.)

Literary Supplement.

Sporting Notes.

BY "FIFE AND DRUM."

With Caulfield abandoned, and with the strike interfering with Flemington, affairs in our racing world had become confused and abnormal. It was therefore very satisfactory to find ourselves once more off to Randwick under all the old conditions. We went by sea, as usual. Come round by boat with me next October, if we are all here, and if nothing untoward has happened in the meanwhile. It is so beautifully restful on board a ship in the mild autumn or the warm spring weather. I was reading a book in my bunk on the voyage, reading lazily, and with that delightful feeling of restfulness all through the muscles, and the nerves, and the bones, and I came upon the following little passage which seemed to hit the nail upon its very head:—"The children cannot sleep, the children of this world, in this foolish hurrying time. In the sweet, old, quiet days, men did great things because they were never in a hurry."

That seems to me to be awfully, beautifully true. Anyhow, you cannot hurry here, whether you will or no, and if you cannot do great things, you can at least achieve a great rest, and, for the forty-eight hours, you can let the world go hang. I have had many prosperous voyages on these anniversaries, but never before one on which everything was so absolutely perfect in the way of weather. And a little incident happened, which, as it afforded me immense satisfaction, it is possible may also give to you a little pleasure as you read of it. We were at dinner, on Thursday evening. A very gentle breeze was blowing from the north, warm and languid. Gloaming was gathering from the east. The light from Gabo Island had already commenced to flash across the sea. There came a message from the bridge: "The chief officer would like to see you at once." I panted up, and there, gliding along with the favouring wind, a grey ghost in the gloom, was a beautiful little barque, and I realised that upon her was my "Benjamin," home from a long, long trek across the broad back of the unharvested sea, from Iquique, San Francisco, Eureka, heaven only knows where.

Sydney Autumn Meeting.

"Poitrel's scratched for the Cup." That was the first thunderbolt that hit us as we landed on the quay in that dusky shed wherein the Howard-Smith ships lie at rest. Confound it! What a sell! We had been looking forward to seeing that little fellow in commission, ever since he won the Melbourne Cup. But never again will we watch the little man loafing along near the tail of a big field, and then, when the inevitable moment came, catching hold of his bit and dealing out disaster and slaughtered hopes to the struggling horses over that last half of a fast-run two miles. He has not broken down, but he was perilously near the same, and we shall not look upon his golden skin upon the gay greensward again. It is perhaps well. "Le roi est mort," and with fervour in our hearts, consciences as clear as glass, we can now together shout furiously aloud, "Vive le roi!" One golden calf has been melted in the furnace, but another such is moulded in its place. A pleasant breeze blew as we wended our ways to the racecourse on Saturday morning, after having been up early and at work amongst the young ones at the yards. There was a good crowd, but, of course, not a record one. Even Sydney, I do believe, is finding that its pockets have a bottom to them, and that money is not quite inexhaustible.

We had a rare day's sport. I, for one, never desire a better. Even the hurdle race, with which we opened the proceedings, presented us with several thrills. The history of the race was this: Colonel K'nut, a vastly improved horse, raced with Stagefright all the way, and they fairly out each other down, whilst Merry Bob with others toiled

perseveringly behind. Which of the two leaders would crack up first. To me it seemed as they approached the bend that the Colonel had some reserve power up his sleeve, and that the Victorian was doomed. But the green and gold of Merry Bob had commenced to creep up now, and South Australia had a show. Over the last flight it was anybody's race, but Bob had saved himself for one final effort, and with Stagefright beaten nearing home, E. J. Mooney just landed the Merry fellow at the post by a very short neck from Colonel K'nut. A capital race!

The Autumn Stakes.

The Autumn Stakes is always one of the most sporting events during the whole four days' racing. Last year it was Poitrel who put down a good field, including Kennaquhair at his best. The year before the same two worthy champions led home a large field, whilst yet a year further away Desert Gold was the victrix, leaving behind her Thana, Gadabout, Lanius, Westcourt, Kennaquhair, Wallace Isinglass, the Fortune Hunter, in his prime, and Rebus. It is always the same. A good field and quality of the very highest. To-day the numbers had dwindled a little, but there was, at anyrate, sufficient quality to make the blood run quick. Eurythmic was making his first appearance over Randwick, and the main question was: "How would that old swinger of his operate whilst galloping the reverse way?" I felt in doubts myself, and many suffered from the same complaint. You could back the chestnut by laying seven to four, which, as things turned out, was marvellously liberal treatment to be doled out by the book-makers to the trusting public. Kennaquhair once more threw his bonnet into the ring, but it is not the braw bonnet of old. Richmond Main was metal more attractive, but Fluency, Braille, Old Gold, Sardis and Amazonia are hardly stuff to make a song about. Sardis, the imported brother to Polycrates, is not in the same class with his speedy relative, and he was very stiff and sore. He may still prove himself a winner, but not until all the memories of the voyage are obliterated from the mind and bones of the immigrant.

Braille is a handicapper, useful, but not a horse of class. Fluency is not a big one, nor is she any better than a handicap mare, and that not under too heavy a weight. Amazonia we know full well. He is but moderate when matched against the swells. Richmond Main did not please me in his canter. He has lost the fire, and even the action of his three-year-old days. He seemed to me, too, to be suffering from a certain amount of corpulency still, as though he had not yet got entirely quit of the superfluity of naughtiness in the way of adiposity which had accumulated during his enforced and lengthy spell. But Mr. Baron fancied him, and he was pretty confident.

Eurythmic stretched out in fine style in his canter, but when he pulled up to turn round, consternation entered into the hearts of his backers and admirers. He refused to come back to the starting post. Dempsey charmed his wisest, a policeman followed suit. My lord would have none of their blandishments. Then, when things were looking very ugly, a flying figure in grey was seen running, and in capital style, too, up to the reluctant colt. "Hulloa, Jack! What's up?" It was his own boy who manages him in the stable, and in an instant Eurythmic was himself again. So the pair of them, and with Dempsey sitting at the wheel, turned and trotted back past the stands, and down to the mile and a-half post. The young man must be in excellent condition, for the way was long and the wind was warm, and the pace a cracker. At the post all was well, and in a few moments Mr. Mackellar sent them off by medium of the new machine for Randwick, Johnstone and Gleeson's.

And then the race was all over. Richmond Main pulled very hard, as if above himself in condition, and when he had fairly run himself to a standstill, before the field entered the straight, Eurythmic shot out to the front, and galloping far better than I have ever seen him perform before, won in a—I was going to say canter, but it was not that, for he was moving—in a style worthy of the best of racehorses. Fluency surprised us all by running second, but it was a straggling and well-beaten field that followed the champion

home. And then you should have seen how the winner "paddled" in to the weighing enclosure. I never saw such a great horse with such peculiar action, and if he was put up for sale to-morrow, and if no one present knew who and what he was, he would be universally condemned by the ringside critics, one and all. Upon my word, the longer I live the less attention am I disposed to pay to delinquencies of action, abnormalities of shape, in young ones, so long as they are bred well, are sound, of good constitution, and of the blood royal.

The Doncaster.

The Doncaster brought its annual surprise, or surprises. Beaufort was looked upon as quite a good thing, and if anything happened to the favourite, then Elfacre, who looked very well, was safe to beat all the rest. Blue Cross, whose form has been so super-excellent at Flemington, was at tens to one, which was a good price to take about one who was manifestly in form, but Greenstead was looking far below his best, and was comparatively neglected in the market. The very "best laid plans of mice and men," you know, "gang aft agley." Elfacre caught the ropes in his teeth, and when these flew up he was left far behind. Beaufort did not have a very good passage. The waters are apt to be pretty rocky in this race. The little-thought-of Wish Wynne made all the running at a great pace until a furlong from home, when Speciality, a great tip, by the way, shot out, and in an instant had the race won. Beaufort, making up his lost ground fast, was third, and Remmon, who was once more sent to the outside of the big field for unseemly conduct, finished well, and was a good fourth. Kikumon, Wootton's imported English mare, was prominent throughout, and her form to-day made some judges think well of her for the Sydney Cup. Clan Fingon was fancied by his owner, Mr. Eric Connolly, who backed him for quite a good stake, but, as usual, the horse played the thief. Old Cetigne, and the still more ancient Sir Ibex, I fear, are lights of other days, and it is about time that they sought the seclusion which their paddocks grant, especially Cetigne.

The Sires' Produce was the next event on the card, and we certainly saw some fine fillies, even if the colts are below par. We looked at Isa at Flemington, and need not refer to her appearance again to-day, except to remind you that she is very charming, well balanced, and all over a race mare. Mr. Clarke's other filly, Furious, is another gem of a very pure ray. She is bigger than Isa, not so flowing in her lines, not so comely, in fact, but a rattling galloper. McLachlan rode her, whilst Lewis steered Isa. Mr. Baron had a confident feeling about Pelaw Main. I was just a leetle wee bit disappointed with the colt. I am never very partial to a black, and am therefore prejudiced perhaps, but I cannot help feeling that there is something not absolutely genuine about this horse. I scarcely think he is quite generous, and I am not so pleased with the set on of his head, and the shape of his gullet, as I would like to be. Woodville is a bay gelding somewhat of the Bandurria type. He is very fast, but I cannot think of him as staying more than a mile. Oranian, Bran Pie, and Vaccine are all of them good handicap horses, but they were hardly the class of the others.

Isa led at a great pace until well into the straight, but here she ran out wide, and thus enabled Furious to pick up the distance which separated the two mares. Pelaw Main, meanwhile, had had a rough passage, and early in the race had dropped back last, or nearly so. Half a furlong from home Furious challenged Isa, and after a fine struggle forced her head and neck in front, and the judge's verdict was half a length. Woodville finished fast at Isa's tail, and Vaccine came fourth, with Bran Pie and Pelaw Main following. They ran the seven furlongs, with big weights up, in 1.26. Good time.

The Leger is never the shadow of the St. Leger at home in England. I suppose the form is so thoroughly exposed that few men, unless their credit balance is a big one, care to take the risk. It is a pity, for the Leger at Doncaster is the beautiful crown that adorns the summit of the racing year. To-day we saw but five three-year-olds, and these five no very great shakes for the last classic event of the season. Salitros looked uncommonly well, and, on appearance, Nautical was himself. David has filled out into a decent looking three-year-old, with substance and power, but I could

see no signs of development in Erasmus since he finished second to Poitrel so gallantly in the Melbourne Cup. Salitros was a very different animal to the weary wight we saw at Flemington, and he gave Nautical a very good drubbing to-day, with David finishing on as though he liked a distance. Nautical is a one-paced horse. Let him stride along at his own will and he will give you a capital gallop. But he can never bring anything out from up his sleeve at the finish. He is a lovely mover, but he will invariably be beaten if the field happens to include a brilliant horse which can stay near him up to the final furlong. That was a fine day's sport, was it not, and the second was nearly, if not quite, as good.

The Flying Handicap invariably gives us an interesting race, and it was so on this occasion. The field was worthy of a Newmarket, and Wish Wynne, a useful Cooltrim, just landed the eights to one, and the thousand added, by a short head from Victrola, with Galtee Maid, who had been running very poorly "down the line" in Melbourne, a fair third. Greenstead, Blue Cross, Gold Tie, Elfacre, Lisnavane, who hates travelling to the right hand, Dunwil, Tressady Queen, and others, were all up to Newmarket form. I fear the beautiful Tressady Queen has turned it up, but she should prove a fine matron in the paddocks.

The Champagne Stakes was more or less a repetition of the Sires' Produce, with one or two additions. Woodville, with an advantage over Furious of ten pounds, was considered a real good thing, but weight, let me tell you, has very little effect upon two-year-olds over six furlongs. Salatis and Isa were both preferred to Furious, all on account of the latter's penalty, but she herself ignored the matter altogether, and won like a queen; yet had Salatis had a clear run, I assure you there would have been no Furious. The big horse was lying next the rails as they raced up the straight, and was going comfortably. Foulsham asked him to make his effort at a furlong from home, and he responded splendidly. At that unlucky moment, however, Furious and Pelaw Main seemed to bore over just enough to hamper the big 'un from getting through. Foulsham had perforce to steady his mount and try again. But this is a hopeless task with a big, overgrown fellow below you, and he had scarcely redeveloped his wonderful speed before the post was passed, and the race lost. Pelaw Main was third, and Isa, who was by no means herself, quite far back.

Mr. McPhillamy had a very taking looking mare in this race, Edina, and she looked extremely well. Her owner was very confident that she would put down all the cracks, and he even induced me to throw away half a sovereign on the tote. She was not good enough to-day, but she will win races later on. And there, we have finished with the important two-year-old contests of the year, and next month we will make an endeavour to unravel the form and spot the Derby winner. At present the oracle refuses to speak, and I can see no vision of the future and "all the wonders that will be" in the coming spring.

The Cup.

And so now to the Cup. A field of seventeen, with Eurythmic a hot favourite at twos to one, and carrying nine stone eight. I like to confess my sins and ignorances, and so boldly state here that I did not think that Eurythmic would win. I had formed such a high opinion of The Rover in the Australian Cup that, a five-year-old, with eight seven on his back, seemed to me a good proposition for a two mile race of this sort. The remainder of the field was poor. Richmond Main above himself, Arch Marella carrying eight nine, Amazonia a moderate, Sardis very sore, Salitros, well, attractive, but awfully uncertain, Nautical an impossibility after the Leger, David ditto, Lingle a light of other days, Parkdale no hope, Braille with a chance for a place, Kennaquhair sour and old, Kikumon not good enough, Syce Knight a non-stayer, and Old Gold not to be thought of. The swell looked as lovely as ever, and in the very pink of condition. Holt had timed him to a nicety in spite of all his racing, and this is the great art in training. Holt must be given the degree of Senior Wrangler at this University of ours. The horse was accompanied to the post by his boy, his friend, the only friend, I believe, whom he admits into his confidence. He is not a "clubbable," hail-fellow, well-met sort of chap at all. Sleigh was again upon The Rover, and I

thought the gelding would have been better with a more experienced rider on his back. Sleigh is a capital boy, but with eight seven up, age and strength and knowledge might have been easily substituted.

Away they go, with The Rover again placed on the outside, a "penalty for behaviour calculated to provoke a breach of the peace." Sardis was actually leading as they passed the stands, with Kikumon handy, Nautical, Richmond Main pulling two double, Salitros, also bent upon taking the lead, and The Rover shut in most uncomfortably in the middle of a closely jammed bunch. Down the back Salitros and Braille were leading, and Eurythmic was occupying a fair position a little to the rear of the centre of the field. He was going very easily, and you know, he never pulls an ounce. Suddenly something happened. What it was I cannot say, for at that very instant my eyes were on the leaders. But in a flash Eurythmic was last, even behind the loitering Kennaquhair. "He's gone!" was the cry all round. Then we turned again to the leaders. Braille was pounding along at a rare bat, Nautical seemed to have a chance, Syce Knight was prominent, as was Arch Marella, with Amazonia half hidden by the crowd. Now they are racing to the bend, and, by Jingo! Eurythmic has a chance still. Braille is first round, with Amazonia handy, Arch Marella going great guns, and Nautical's bolt not yet shot. Eurythmic is in the fighting line, and has somehow secured a position near the rails. "He's coming!" Oh! Blow it



GOLDSBROUGH.

Owned by the late Frank Reynolds, Tocal, N.S.W. This photo was taken a year before the horse's death.

all, there's trouble again. Dempsey has to bring him out, once more to get a clear run, and he has a fearful lot of leeway to make up to overhaul Arch Marella and Amazonia. Arch Marella is going awfully well. But the red jacket is travelling at a prodigious pace now. Arch Marella is still fresh, and galloping straight as a gun barrel. But a pigmy can never run away from a giant. Dempsey is riding with hand and heel, and the horse gives him all he knows. His jacket fairly flashes as it tears along. "He CAN catch him. He WILL catch him. He's GOT him!" By Jove, what a run! What a performance! Better than Carbine! Ha! let us leave it now, and ponder over that when the first flush of enthusiasm has died away.

Racing men are beggars to argue, and from now till the cows come home, they will "argle barge" over all the possibilities. "Would Eurythmic have beaten Poirrel? Is either of them, or both of them, as good as Carbine?" Kings die and are buried, are born again, or others take their place. It is all part of the game, and once more, "Vive le roi!"

After the great race the sport still kept up to a high standard, but the glory had gone out of the sunshine, and the cream was skimmed from the milk. Eurythmic, as a

matter of course, took the two-mile Cumberland Plate cantering, but not looking, to my eye, quite at his best. And he was judiciously spared the ordeal of the long three miles on the last day. So we leave the racing, and next issue we will devote ourselves to an examination of the sales, which were very good indeed. They were too good to cram into a small space.

Before saying farewell, I beg of you to look at the photograph of Goldsbrough on this page. It is full of interest. He is very old in the picture, which was taken a year before he died, but noble still. And when looking at him remember that he is the progenitor of some of the greatest brood mares we have ever had. This reminds me that I have received a letter from a correspondent saying that the picture of Fisherman, in last month's Review, does not one little bit resemble the painting of the same horse by Herring. That is very likely. I have seen three representations of Fisherman by different artists, and you could not tell that any of them were meant for the same horse. I hope to get a photograph of this Herring in order to reproduce it here, and we can then compare it and Borrow's work satisfactorily together. I must almost apologise for the great space I have taken up with an account of the Randwick meeting, and more especially the Cup. But it was historic, and deserved an issue all to itself.

Blood Sires.

BY "FIFE AND DRUM."

Maltage.

What a successful family this horse comes from! Mala, Maletta, and Aleconner showed really splendid form between them, and you can never forget how Mala won the Debutant Stakes, the Sires' Produce Stakes at Flemington, the Railway Handicap, and, above all, the Newmarket. He was a rare sprinter. Aleconner put the Bourke Handicap to his credit, the Armidale Cup, the Memsie Stakes, the October Stakes and the Standish. Both these horses lasted quite a long time upon

MALTAGE, Ch. 1910 (18).	La France	Wild Rose	Primrose	Newminster (3)	Spa	Goldsbrough (13)	Corisande	The Marquis (2)	Satanella	Fireworks (10)	Sylvia	New Warrior (24)	io																			
		Mersey	Clemence	Eulogy	Knowsley (3)	half-sister to Musket's dam	Newminster (8)	Cinzelli	Leamington (14)	Satanella	Fireworks (10)	Sylvia	New Warrior (24)	io																		
	Carnage (2)	Nordenfeldt (13)	Onyx	Chrysolite	Angler (2)	Peel's dam	Toxophilite (3)	half-sister to Gen. Peel's dam	Musket's dam	Newminster (8)	Cinzelli	Leamington (14)	Satanella	Fireworks (10)	Sylvia	New Warrior (24)	io															
	Barley	Lonely	Anonyma	Miss Sarah	Stockwell (3)	Newminster (8)	Seclusion	Bon Accord	Belladrum (22)	Darling's dam	W. Australian (7)	Beechnut	Kt. of St. Patrick (3)	Oxford (12)	Whisper	Sterling (12)	Beachy Head	Electric Light	St. Angela	Galopin (3)	Vedette (19)	Flying Duchess	King Tom (3)	Adeline								
Maltster (21)	Bill of Portland (26)	St. Simon (11)	Galopin (3)	Vedette (19)	Flying Duchess	King Tom (3)	Adeline	Oxford (12)	Whisper	Sterling (12)	Beachy Head	Kt. of St. Patrick (3)	Beechnut	W. Australian (7)	Darling's dam	Belladrum (22)	Bon Accord	Newminster (8)	Seclusion	Stockwell (3)	Miss Sarah	Toxophilite (3)	half-sister to Gen. Peel's dam	Musket's dam	Newminster (8)	Cinzelli	Leamington (14)	Satanella	Fireworks (10)	Sylvia	New Warrior (24)	io

Owner: Mr. E. A. Underwood, Warlaby Park, Oaklands Junc., Vic.

the turf, and were very sound. Maltage, unfortunately, never quite got there during his short career, but he came very close to it on several occasions, and he had whips of pace. Sons of this horse ought to be sires, if there is anything in sire families at all. Kindly look at the back lines of Maltage, and you will see that he is chock-a-block full of the most approved sire families. Stockwell, Knight of St. Patrick, Oxford, Newminster, Leamington, Musket, Toxophilite, Galopin, Knowsley, the Australian Newminster, and so on. Each of these possesses an ample supply of strong masculine blood. Maltage himself, as you can see from his photograph on p. 278, takes distinctly after his own family in his make and shape and general character. The longer I live the more ambitious am I to see the home-bred sires made use of in our Australian studs, and here is a chance offered to you. He is owned by Mr. E. A. Underwood, who I can assure you is a very knowledgeable man where the horse is concerned. He is the amateur, you may know, who has so successfully trained Acerington for his many victories.

Wallensis.

This chestnut horse is fifteen years old. He is owned by that enthusiastic student of breeding and lover of the blood horse, Mr. B. Welsh. I know few men who are keener on the subject of the racehorse than Mr. Welsh. Wallensis was bred by Mr. William Brown, and he did not race very often. He failed to score as a two-year-old in four starts, but gained a couple of winning brackets as a three-year-old at Wallend and Newcastle. We want Wallace sires in the country that prove themselves capable of producing winners, and Wallensis is getting them to gallop. He looks the part, I must say, and he is "well come." Musket upon St. Simon, with Fisherman thrown in. Just run your eye down the sire names in the fifth remove. Almost all of them are gilt edged, sire and running, but more particularly sire families, and most of them providing a great strong buttress of Touchstone and Stockwell, Orlando, Lord Clifden, St. Albans, Knight of St. Patrick, Oxford (Birdcatcher), King Tom (Whisker), Sir Hercules (Whalebone), Newminster, Stockwell himself, and Longbow. There is nothing marelike in the head of Wallensis, and he has great flat bone, long quarters, deep ribs, good rein. We ought not to allow horses like this to lapse into obscurity. (For photo see p. 278.)

WALLENSIS (5).	Wallace (3)	Carbine (2)	Musket (3)	Toxophilite (3)	Longbow (21)
		Mersey	dam	Knowsley (3)	Legerdemain
	Melodious	Goldsbrough (13)	Sylvia	Clemence	W. Australian (7)
		Melody	Mermaid	The Barb (†)	Brown Bess
	Bill of Portland (26)	St. Simon (11)	Galopin (3)	Flying Duchess	Stockwell (3)
	Chantress	Electric Light	Sterling (12)	Beachy Head	d. by Orlando— Brown Bess
	Chand Beebe	Royal Hampt'n (11)	Hampton (10)	Princess	Newminster (8)
		Missy Baba	Springfield (12)	Gonga Jee	Eulogy

Owner—Mr. B. Welsh, Hythe, Mangalore, Q.

Agriculture.

Australian Grain Crops.

The Season.

Fair to heavy rains have been recorded over the main agricultural areas of Queensland and north and central New South Wales since last writing. These, following on the falls reported the end of February and early in March, will enable farmers to get on with their ploughing and working fallow. The precipitation in the south of New South Wales, Victoria and parts of South Australia has been patchy. Generally speaking, it is not sufficient for current requirements, while the country lying south of the Divide, including practically the whole of the Western District of Victoria is decidedly dry. Here effective cultivation is only possible on the more friable classes of soil. Heavy land needs a good deal more rain before it can be properly worked. More or less dry conditions also prevail in the agricultural districts of Western Australia.

"Take-all" caused considerable damage to wheat crops last harvest, so the following notes on the disease and its prevention, by Mr. H. A. Mullett, of the Victorian Agricultural Department, will not come amiss just now. He considers that two factors are usually responsible for the prevalence of the trouble. The first is the practice of heavily cropping the land with wheat, and then second, the careless burying of the stubbles, or what remains of them after a paddock has been fired. Once a plot or field has become infected, undecayed straw, such as is so often seen lying about on the fallow, can carry the spores of infection through to next season. A host plant like barley grass is not necessary. This was proved in a typical case in the Wimmera last year, where the yields of two paddocks on a particular farm, and only separated by a wire fence, differed to the extent of five bags to the acre. It appears that the field that grew the clean crop had in 1918 been spelled with oats, and the wheat was sown on a well-worked, summer fallow. In the other case, the paddock had not been spelled with oats for many years, the stubbles of the 1918 wheat crop were not burnt, and the working of the fallow somewhat neglected in the following spring. The result was a severe outbreak of "take-all." Mr. Mullett is of the opinion that while the oat crop undoubtedly helped to starve out the disease, it in itself was not sufficient. The trouble was carried by the undestroyed straw, and to ensure freedom every vestige of an infected crop must be got rid of. Usually this can only be done effectively by deep ploughing and properly working the fallow.

Another matter of moment at the present time is the selection of the variety of wheat to grow in any particular locality. No doubt most farmers have learnt this by practical experience, and will act accordingly. At the same time it is interesting to recall how the different crops stood the peculiar weather conditions that prevailed last season. It will be remembered that very heavy wind and rain storms were experienced in parts of New South Wales and elsewhere just before harvest. The general experience then was that Federation wheat lodged less than any other, and yielded better on the whole. Yandilla King was another variety that stood the storms well. Amongst the oats grown at the Cowra, N.S.W., Experimental Farm, Lachlan and Gresley were less affected by the adverse weather than others.

While on this subject we may give the results of the wheat variety tests conducted in the newer Mallee districts by the Victorian Department of Agriculture. The department has during the last five years tested seventeen varieties at two representative centres—Cowangie and Carwarp. Many proved quite unsuitable to the peculiar northern Mallee soil and climatic conditions, and were discarded. The best results of all during last harvest were obtained with Galipoli, which averaged 26 bushels 43 lbs. to the acre. This is a new variety developed by the department. Federation and Penny came an equal second with averages of 25 bushels 22 lbs. per acre. The next was Currawa, 23 bushels 41 lbs.; then followed Dart's Imperial, 22 bushels 48 lbs.; Canberra, 22 bushels 42 lbs.; and Mac's White, 21 bushels 24 lbs.

A Queensland departmental report states the maize crops on the Atherton tablelands, in the far north, are wonderfully good this year. It is estimated that 12,000 acres have been put under the crop adjacent to Atherton and Tolga, and that a yield of 70 bushels per acre will be common. Unfortunately, the low prices current for the grain will largely counterbalance the financial results expected from the heavy yields. However, the present depression may perhaps do good if it makes growers realise that the most profitable outlet for maize, year in and year out, is to use it for fattening stock on the property. Once get farmers to recognise that fact, and all trouble of glutted grain markets will be at an end.

The Pools.

The second payment of 2s. 6d. per bushel to holders of certificates for wheat delivered to the 1920-21 pool was made available on 4th April. It is estimated that a sum of nearly £16,000,000 is being distributed immediately, which will be more than just welcome to the majority of wheatgrowers. An announcement has been made that there is no objection to growers transferring surplus certificates now that the second payment has been made. Of course, such transfers will be subject to the regulations applying in the different States. Mr. Hill, M.H.R., one of the growers' representatives on the Wheat Board, holds that the scrip should be worth well over 2s. 6d. a bushel, and advises holders not to part with it too cheaply.

There is still no word as to when the earlier pools are likely to be finished. The latest return shows that there are some 6,214,000 bushels of old wheat belonging to the different pools prior to 1920-21 in shippers' stocks, practically the whole being in South Australia. As regards the 1919-20 season, all but 108,000 bushels have now been shipped or sold locally, so that it should not be long before a final settlement is possible in that connection.

Statistics issued by the Australian Wheat Board show that a total of 126,977,000 bushels had been received into the 1920-21 pool up to 28th March. The receipts on behalf of the different States were:—New South Wales, 50,149,000 bushels; Victoria, 37,000,000 bushels; South Australia, 29,528,000 bushels; and Western Australia, 10,300,000 bushels. Shipments overseas to the date mentioned were 28,190,000 bushels, indicating a clearance of nearly 9,000,000 bushels during the preceding four weeks. Local sales account for 8,000,000 bushels, while shippers' and millers' stocks stand at 90,787,000 bushels.

An effort has been made by a section of the press to work up bad feeling owing to the reported sale of a quantity of wheat to Germany at a price lower than that charged for local consumption. The Wheat Board refuses to confirm or deny the report, but private information received from apparently reliable sources says that 160,000 tons, March, April and May shipment, have been sold at 77s. per quarter c.i.f. Reckoning freight at 70s. a ton, and taking into account other charges, the f.o.b. price on this basis would be somewhere about 7s. 9d. a bushel. Another cause for grievance is that the price of wheat supplied to millers for gristing for the African, Eastern and Island trade has been reduced to 7s. 11d. a bushel, which is 1s. 1d. below local consumption rate. (It is now 7s. 6d. per bushel.—Ed.) Capital has been made of the cry that Germans and Asiatics are being supplied with Australian flour at a cheaper rate than the Australian working man, and so on. Needless to add, it is the representatives of the Australian working man, living in the cities, who are making most of the noise.

It is hardly necessary to go into the ethics of the case in a producers' organ like "The Pastoral Review." Sufficient to say, that the representatives of the State Government some time back, when, by the way, the world's parity of wheat was well over 10s. a bushel f.o.b., fixed the price for local consumption at 9s. There was no outcry from Labour leaders then; as a matter of fact, it was the influence of Labour Governments which fixed the figure at 9s. Producers, although they were not then getting the world's parity, agreed to that rate, believing that it was to last for the whole year. It is only now, when values overseas have dropped, that the question of revision has been raised. What is more, it is known that the average of all sales made overseas this season to date works out at over 9s. a bushel, f.o.b. As far as sales to Germany are concerned, the average is over 10s., according to Mr. Dunn, Labour Minister for Agri-

culture in New South Wales. Whether the Wheat Board will be influenced by the outcry, and go back on the agreement by reducing the price, remains to be proved. The next meeting is to be held in Sydney on 21st April.

An interesting table, illustrating how the local consumption price compares with the average of overseas sales for the earlier pools, has recently been published in a Melbourne paper. It is compiled from the balance-sheet of the Victorian Wheat Commission, and although it only applies to the one State, it can be taken as approximately correct for the whole of Australia. The figures are:—

Season.	Bushels.	Sold Oversea.		Sold Locally.	
		Average Per Bushel.	Bushels.	Average Per Bushel.	
1915-16	.. 48,953,920	4s. 9.50d.	10,870,678	4s. 11.59d.	
1916-17	.. 33,165,271	5s. 1.3d.	15,483,259	4s. 4.78d.	
1917-18	.. 19,868,500	6s. 3.81d.	11,837,842	4s. 11.09d.	
1918-19	.. 12,425,948	6s. 9.1d.	5,831,680	5s. 2.8d.	
1919-20	Oversea sales to August averaged 11s. 0.50d., and since then, if anything, have averaged more.		Locally the fixed price was 7s. 8d.		

The compiler of the table says we can take the average local consumption for Australia as being 34,000,000 bushels, so that from the above figures it would appear that for 1915-16 season the Australian public subsidised the farmer to the extent of £283,333 6s. 8d., but for the following four years the farmer subsidised the Australian public to the extent of as follows:—

		March 31, 1921.	
Season 1916-17,	34,000,000 bushels, at, say, 8 3-5d. p.b. ..	£1,218,333	
Season 1917-18,	34,000,000 bushels, at, say, 1s. 4½d. p.b. ..	2,284,357	
Season 1918-19,	34,000,000 bushels, at, say, 1s. 6 1-3d. p.b. ..	2,597,222	
Season 1919-20,	34,000,000 bushels, at, say, 3s. 4½d. p.b.	5,737,500	
		£11,837,412	
Less season 1915-16	.. .. .	283,333	
A total of	.. .. .	£11,554,079	

Comment is needless.

Mr. H. N. Barwell, Premier of South Australia, in his pre-election policy speech, made references to the pooling scheme. He said in effect that while the Government found it absolutely necessary to agree to a compulsory pool for the 1920-21 crop, its policy is to discontinue the system as early as possible. These remarks were received with gratification, but it may be mentioned in passing that although somewhat similar views have been expressed by leaders of other State Governments, mortal little has so far been done to return the trade to normal channels. It was understood that a ballot was to be taken amongst growers to ascertain their views on the continuance or otherwise of the compulsory pooling scheme. Up to the present we have heard nothing of the papers being prepared. Time is pressing, and unless arrangements for taking a vote are soon got in train, it will be too late to do anything this season.

Opinions amongst producers seem to be sharply divided on the question. In some States there is very strong opposition to the continuance of the pool in any form. The matter came up for discussion at the conference of Australian Farmers' Federal Organisation, held in Sydney the middle of last month, and led to quite an animated debate. The original motion, moved by a New South Wales delegate, was worded:—

"That in the opinion of this conference a continuation of the wheat pool, and a guaranteed price for the 1921-22 crop, is essential to the welfare of the wheatgrowing industry."

After considerable talk the reference to the guarantee was taken out, and the motion as amended passed. Later, the following resolution, moved by a Victorian delegate, was agreed to:—

"That this Federal farmers' organisation ask the Commonwealth to guarantee a first payment on wheat, such advance to be 60 per cent. of the estimated value of the crop."

A ballot for the election of the West Australian wheat-growers' representative on the Australian Wheat Board has resulted in the election of Mr. Sinclair McGibbon, who obtained 1514 votes, as against 1325 for Mr. H. H. Paynter.

The first overseas shipment of wheat from the Queensland State pool was made early this month. The Minister for

Agriculture says the question of continuing the guarantee on wheat grown in the State into next year is to receive most careful consideration from the Government.

Bulk Handling.

It is definitely stated that the W.A. Government has made over to the W.A. Grain Growers' Co-op. Elevators Limited a site at North Fremantle for the erection of a terminal elevator. Arrangements have been made for the immediate preparation of site plans.

A proposal to form a company on similar lines to the one in Western Australia is being put before South Australian wheat-growers. The concern is to be called the Farmers' Bulk Grain Co-operative Company Limited, and is quite distinct from the Farm Grain Silo Company Limited, a company that has been on the tapis for some little time. The Bulk Company claims to have an agreement with the Government that when farmers have applied for and been allotted 200,000 shares, it would introduce to Parliament resolutions to enable the company to instal the system. The capital is restricted to £500,000 in £1 shares, and the Prime Minister has promised to loan the company £2 for every £1 subscribed. Little over a month ago 70,000 shares had been allotted to about 1000 farmers.

Freight.

The freight position remains flat. A London cable of 20th March mentioned that a few fixtures had been made to load Australian wheat in April and May at 61s. 3d. a ton, which was about on a par with the charge ruling the beginning of March. However, early in April the rate for April-May loading was quoted at 60s. and May-June at 57s. 9d.

Markets.

The London market has been quiet since last writing. The British Government's new c.i.f. selling price for Australian wheat as from 1st April is 78s. 6d. per quarter 480 lbs. for f.a.q. grade, or 9s. 9½d. a bushel. On recent freight commitments this would probably work out at about 8s. f.o.b.

From the few American advices received it appears that the Chicago market is weak. May delivery on 2nd April was reported at 5s. 8½d. per bushel, and July as low as 4s. 10d.

As regards Australia, the Wheat Board has lately reduced the charges for wheat supplied to millers for gristing into flour for shipment to South Africa, the East, and Pacific Islands from 9s. to 7s. 11d. a bushel. Even at the revised price millers complain that it is difficult, if not impossible, to do business. The price for grain for New Zealand flour has also been reduced from 9s. to 8s. a bushel. Rates for local consumption remain at 9s. per bushel.

[Later.—The export price for South Africa, the East, Pacific Islands, and New Zealand has again been reduced. The rate is now 7s. 6d. all round.]

Fodder.

The delay in the appearance of the autumn rains has helped to firm values for feed lines generally in the south. The actual advance is not great, but there is a better tone in the markets. Following are current Melbourne quotations for wholesale lots of average quality:—Bran and pollard, association price £11 per 2000 lbs. net, market price (nominally) £12 10s.; oats, Algerian feed, 2s. 6d. to 2s. 8d. a bushel; maize, 5s. a bushel; chaff, £4 15s. to £5 a ton; hay, manger sheaves, £4 to £5 per ton.

In Sydney bran is quoted at £9 and pollard £10 a ton net; oats, Algerian feed, 3s. 3d. per bushel; maize, prime dry yellow 5s. 9d., white do. 5s. 6d. a bushel; lucerne hay, Hunter River, £3 to £5 a ton.

Adelaide rates for bran and pollard are £10 15s. per ton; oats, 2s. 2d. to 2s. 3d. a bushel; chaff, £5 5s. a ton on trucks at Mile End.

Argentine Grain Exports.

(TO BRAZIL INCLUDED.)

	Total 1919.	Total 1920.	1921. 1st to 27th Jan.
Wheat tons	3,258,259	5,029,958	30,713
Maize tons	2,374,731	4,387,736	210,667
Linseed tons	840,272	1,014,340	65,330
Oats tons	331,350	410,537	26,051

ACRES SOWN.

	1919-20.	1920-21.
Wheat	15,133,500	15,190,250
Linseed	3,563,000	3,524,625
Oats	2,397,600	2,087,500

Agricultural Notes.

Government control of wheat and flour in France ends at May, 1921.

Stringent Government control of bread grains in Germany is reported to be having the effect of reducing the area sown.

The area sown with wheat in Canada this year is expected to show a substantial increase on the 13,232,374 acres in 1921.

Crops in the United States were reported to be promising well at the end of last month. The acreage is about normal.

A Liverpool cable of 1st April reports that European crops are in fair condition, and that the acreage cultivated is being slowly increased.

Shortly after the South African Government entered into contracts for the purchase of Canadian flour, the market began to drop. The downward movement has continued ever since, and the Government is faced with the probability of making heavy losses, up to £500,000 on the deal.

The New Zealand Government has decided to guarantee the following minimum prices for wheat produced in the Dominion during 1921-22 season:—5s. 6d. per bushel, southern ports, for Tuscan and similar varieties, 5s. 9d. for Hunter, and 6s. 3d. for Pearl, with increments the same as this year.

Plans for the co-operative marketing of grain in the United States are being pushed forward. A Chicago cable of 1st April says the matter has been discussed by representatives of farmers' organisations with the Secretary for Agriculture, and that the proposed scheme includes Government assistance.

Recent tests with electrically-treated seeds of oats and wheat, carried out in Victoria and South Australia, tend to show that the process might be a commercial success in the country. In each reported case higher yields were obtained than on adjoining plots, where the grain had not been treated.

The quantity of wheat held on farms in the United States on 1st March is officially given as 207,591,000 bushels. Showing that the American authorities have lately been saying that surplus stocks were almost absorbed, this total is surprisingly large. Roughly 80,000,000 bushels of the above will be required for local consumption between March and the end of July, when the new crop becomes available.

The Blowfly Problem.

The Queensland Special Blowfly Committee has issued a pamphlet containing a number of suggestions for dealing with the fly as the outcome of seven years' investigation.

They may be summed up as follows:—

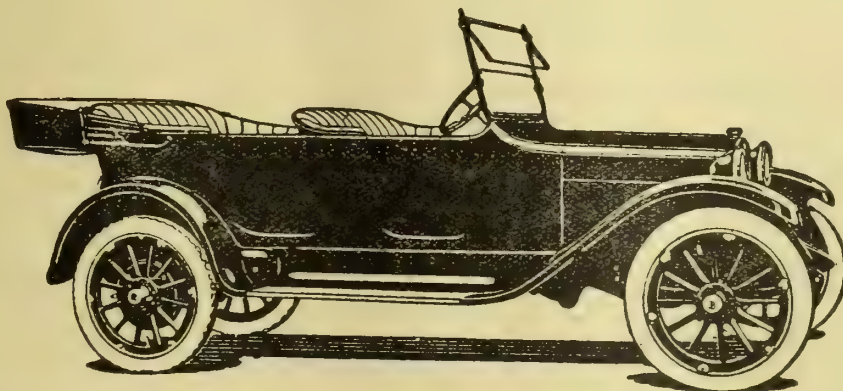
1. Careful and frequent inspection of all sheep.
2. The wholesale destruction of adult sheep maggot flies by means of poison baits and traps placed near shearing sheds, homesteads, and clumps of trees, &c.
3. The prompt destruction of all dead animal matter noticed around the homestead, or places such as waterholes, or sheep camps, where they congregated by burning or saturating with a strong solution of arsenic. Note.—A quarter of a pound of meat is said to furnish sufficient food to breed 250 blowflies.
4. The destruction, as far as possible, of the stomach worm, *Strongylus Contortus*.
5. The preservation of insectivorous and carrion-eating birds, and the planting of patches of trees suitable for cover in which they may breed in security.
6. Dipping of sheep with not less than two months' wood in an arsenical dip.
7. Thorough jetting every two or three months up to shearing.
8. Isolate and dress thoroughly all fly-blown sheep until completely recovered.
9. Do not use crude arsenic on wounds, and in every case when dips are used mix according to directions.

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The Wool Trade.

The Wool Trade in Australia and New Zealand.

When the Australian wool auctions opened in Adelaide in October of last year, there were not wanting those who saw the event the return to normal conditions in what may be truly claimed to be Australia's key industry.

Unfortunately, before a short six months has elapsed, such hopes have proved but transitory, and it has been found necessary to adopt a scheme unparalleled in its conception, at least in times of peace.

One has in the past few years become so used to big schemes that one is apt to overlook the fact that the scheme now to be adopted has, as its main spring, the suspension—temporarily at least—of the economic law of supply and demand. Such was possible, perhaps, in times of war, when the world was commercially, at least, in comparatively small compass, but it has yet to be proved whether it can work when the world nominally is at peace; however the motto of French allies, "l'audace, toujours l'audace" may apply, it is undeniably a bold attempt to solve a tremendously big problem.

Since Xmas wool prices have receded monthly, until many descriptions are to-day of a minus value, so far as production is concerned, while America, which has been a strong competitor on suitable wools, forcing values for such up to a level unheard of until the armistice boom set in, has dropped

The seriousness of the position has long been realised by the leaders of the various sections of the pastoral industry, and as an outcome of many meetings, a conference of representatives of every section of the Australian wool industry was held in the offices of the B.A.W.R.A. on the 17th March, at which an address was delivered by the chairman of that company.

B.A.W.R.A.

As the speech made on the occasion above referred to appears very fully elsewhere, there is no need to repeat same, and touching on a few of the most salient points.

Perhaps the main one was that it is proposed to fix a reasonable selling reserve, based as far as practicable on the cost of production, below which no wool controlled by the B.A.W.R.A., or forming part of the current clip, would be sold, either in Australia or London. How this is to be achieved at it is quite impossible to say, but in furtherance of such, the selling brokers' valuers in the different selling centres have furnished a scale of values ruling during the recent auctions, which in turn, it is understood, have been adopted by a special committee of experts, and submitted to the chairman of the B.A.W.R.A. As this has been done by one of the men who were responsible for the table of limits which proved so successful under the appraisal scheme, it may be taken for granted that the work has been well done. Whether February or March figures have been taken as a basis is not known, but it will probably be found to be a compromise between the two, possibly an advance of some per cent. above the former. It is learnt, however, that a table has been finally drawn up and cabled to England for approval, result not yet being known.

A further point is the fact that of the wool to be submitted to auction in Australia and England the quantity allocated for Australian auctions must not be less than the total British offerings, and as British offerings are to be in a ratio of not less than two bales of carry-over wool to one of free, there will be nothing to be gained by shipping.

As to how the Colonial Wool Merchants' Association is to be brought into the scheme is shown in the following circular issued by the B.A.W.R.A., and addressed to the chairman of

the former body and signed by Sir Arthur Goldfinch, the closing paragraph being particularly significant:—

Ministry of Munitions Supply,
Caxton House, Room 553,
Tothill-street, S.W., 1,
21st January, 1921.

Dear Mr Weddel,—The London directors of the B.A.W.R.A. have had under anxious consideration in their first two meetings the very difficult problem of devising a method for regulating the offerings of old and new clip wool in such a manner as to bring to an end the continuous downward tendency which has prevailed for so long. I think the following conclusions might be generally accepted by those interested in the sale of Australian wool:—

1. Though there is still some profit in the selling prices of super Merinos, the discounts for lower quality and condition, imposed by the increased conversion cost and the preference for fine fabrics, bring about the result that on the present basis of fine Merinos coarse carbonising wools have a minus value in the producing markets. It seems to follow from this that it is foolish for the producers to allow buyers to pick out the very choicest parcels of Merino wool at the very reduced values of to-day.

2. Unless some agreement between the sellers of old and new clip wool takes place, there will be a tendency for prices to fall at each successive sale. Demand will not reach anything like adequate quantities until confidence is restored, and confidence will not be restored till the fall in prices ceases. Therefore the fall in prices must be arrested not by improvement in demand, but by concerted resistance on the part of the sellers.

3. The holders of old clip wool have done much more than their share up till now in the task of resisting the downward slide of prices. It is morally impossible that this should continue, and the choice between the owners of new clip wool is either to make the sacrifices required to take their share of resisting the fall or else to accept as inevitable that the owners of the old clip wool shall join in the scramble for the small available demand for wool.

The London directors are taking it for granted that the owners of new clip wool appreciate the situation or can be readily brought to do so, and that they will not elect to oblige B.A.W.R.A. to instruct the brokers to get a full share of the sales for old clip wool by meeting the competition without limit. We have, therefore, been considering what would be a fair basis on which the business should be divided. Considering that we hold $2\frac{1}{2}$ million bales of old clip wool against a maximum clip in Australia and New Zealand of 2,150,000 bales this season, it would certainly not be unreasonable to expect to get half the sale in all markets for old clip wool. We are inclined to fear, however, that to insist upon this would much increase the difficulty of arriving at an arrangement. Our feeling is that it would be practicable, and though not fair to us, still more acceptable than the present position, if it could be agreed that the quantity of wool offered in Australia in each month should not be greater than the quantity offered in London. All the wool offered in Australia will be new clip wool, and we should have to insist, therefore, that at least two-thirds of the wool offered in London should be old clip wool. If, for instance, it was agreed that 90,000 bales should be offered in Australia and 90,000 bales in England, the total quantity of old clip wool would be 60,000 bales, against 120,000 bales new clip wool. This is a much smaller proportion of old clip wool than we were willing to agree to in the discussion in August and September last, but I am most anxious to arrive at an agreement which can be smoothly and promptly carried out, and therefore I have made the terms as easy as possible for the new clip wool. I recognise that even so the owners of the new clip wool will not do so well in London as they were hoping they would do, but these hopes had no foundation, as it could not reasonably be expected that the owners of the old wool should indefinitely stand on one side to protect the imports of new clip wool into a market which is already so very fully supplied.

In order to make the arrangements effective it would have to be agreed that common selling limits should be arrived at for each sale, and that the Committee of London Wool Selling Brokers should undertake impartially to apply the schedule of limits to all the wool without discrimination so that as nearly as possible not only the offerings, but the actual sales of the wool should be in the proportion of two bales of old and one bale of new clip wool.

I am well aware that this proposal will offer difficulties from the point of view of importers, and that there may be still greater difficulties in carrying out that part of the arrangement which would apply to Australian sales, especially the application of selling limits at the same parity of prices which would, of course, be essential for the success of the scheme. I wish, however, that you and your friends should at once take these suggestions very earnestly into consideration, for I assure you that the present arrangements, which may possibly suit private im-

porters very well, simply cannot be allowed to continue from the point of view of the B.A.W.R.A., and whatever else happens we are never again going to see a repetition of the experience of the December and January sales. What your friends, therefore, have to choose between is an arrangement more or less on the lines I have outlined or else keen competition between old and new clip wool, for we are determined to have our full share of the business whether we get it by agreement, as we would so much prefer, or by competition, as we shall have to do if our friends refuse to enter into a working alliance.—Yours sincerely,

(Signed) A. H. GOLDFINCH.

Following on the address above referred to, a statement was made in Brisbane by one of the directors of the company, which throws further light on the position, particularly in respect to the anticipated payment. He is reported to have said:—

The total appraised value of wool purchased by the British Government was £153,000,000, and £22,000,000 was fixed as the assets of the association, hence each grower would receive, after making necessary deductions for commission, certificates and shares, approximately one-seventh of the total appraised value of all his wool under the Imperial wool purchase scheme. The wool certificates would eventually be worth their face value, but the value of the shares would depend absolutely on the market price of wool current for the next few years. As there were 149,000 wool accounts on the books, and many thousands of growers had less than £100 total value of all their wool in the pool, it was proposed to pay off or retire the interests in the association of these small growers. They would be paid in cash, values to be computed on a proper and equitable basis, whatever their interest might be, instead of receiving wool certificates and shares for such small amounts. If a small grower had a total of £100 worth of appraised wool in the Imperial wool purchase scheme, he would receive approximately one-seventh of £100, or about £14 (less discounts for cash) in full liquidation of his interests in "Bawra." These small accounts were so numerous that it would require about £600,000 to pay them all off. There would then be about 70,000 names on the register for wool certificates and share scrip. The nature of the company's position in acquiring assets for which they had paid nothing, and for which they acted merely as realisation agents, might render it worthy of special consideration from the taxation commissioners, and it was probable that a conference with the State and Federal Commissioners of Taxation would be held to determine these matters.

As to the actual method of payment, nothing definite is known, but probably some form akin to a wheat certificate would be adopted, collectable through the ordinary channels.

Touching on the much-debated question of the actual costs of production, it was stated that United States figures went to show that the cost of production was 22d. per lb., and in view of such it was imperative that some concerted attempt be made to ascertain the Australian cost, both as applied to Merino and crossbred.

The latest available statistics of the world's total production were quoted as being in 1915:—2,799,000,000 lbs. weight, divided into 1,074,550,000 lbs. Merino, 1,022,450,000 lbs. crossbred, 702,000,000 lbs. low wools or carpet wool. In 1915 Australia had produced 570,000,000 lbs. weight, while the latest return for the 1919-20 clip gave Australia's production as 700,000,000 lbs. (on a greasy basis).

All the foregoing will serve to show that the scheme is, so far as can be seen, the only acceptable way of evolving some sort of order out of what is now practically chaos, and it is up to one and all to work wholeheartedly for the furtherance of such.

It is stated that a fully accredited representative of New Zealand is leaving there to discuss with the British-Australian Wool Realisation Association the question of the handling of the carry-over wool of the Dominion by that body. He will also discuss with the association the question of dealing with the current clip on the same lines as have been submitted to growers here with regard to their wool.

Auctions.

The allocations for the April series of Australian sales were originally fixed at 110,000 bales, of which Sydney would

submit 42,000 bales, Melbourne and Geelong 26,000 bales, Brisbane 22,000 bales, Adelaide 10,000 bales, and Fremantle 10,000 bales.

In view of the recent developments, the sales have been temporarily, at least, suspended, with the exception of Western Australia, which was to offer 10,000 bales on the 18th inst. It is still possible that other sales may yet be held in April, but in reduced quantities. On the other hand, however, it may be found necessary to cancel same until the new scheme is in full working order, and in the meantime all sales of wool passed in out of earlier catalogues have been suspended.

The April sales in London originally were to include 115,000 bales, but the B.A.W.R.A. decided to reduce the offerings from 60,000 bales to 15,000 or 20,000 bales, also fixing reserve prices substantially higher than the closing prices of the February and March series, no reserve, however, applying to the free wools. [The sale of "Bawra" wool in London last week was cancelled, as also the fixture for Antwerp on 22nd inst.—Ed.]

Cabled reports quote a further fall in Merinos as compared with March closing prices of from 10 to 20 per cent. with crossbreds neglected, nominally 10 per cent. lower.

It is understood that a basis of reserves was adopted by some sellers on the lines of the level of prices ruling on 10th February, less 10 per cent., but that such was not universal, the banks not altogether agreeing to the proposal.

LOCAL AUCTIONS.

Melbourne.

The second section of the March series, which was divided to allow buyers to visit Tasmania, disclosed a depressed market, with heavy withdrawals all round. So far as it was possible to quote in the face of the general irregularity, prices were materially lower than at the beginning of the month, the Easter vacation coming as a relief to all concerned.

The April series was set down for the 18th inst., but as Sydney is temporarily suspended.

Sydney.

The ninth series of sales in Sydney closed on the 14th March, prices showing no appreciable change as compared with those ruling during the eighth series, Japanese competition being the factor in regard to the better class lots.

The April series was originally scheduled to commence on the 4th inst., but at the last moment sales were suspended at the instance of the National Council of Woollselling Brokers, doubtless with the view of finalising a basis of reserves, to come into force as early as possible.

Tasmania.

Tasmanian sales were eventually held, the condition of the wools submitted, as a whole, being disappointing. American operators were good competitors on suitable wools, France also being noticeable on the finer haired wools. Clearances were on fairly good lines.

Stocks of Wool on Hand.

The statement issued by the chairman of the B.A.W.R.A. of the stocks of Australasian and Falkland Islands wool (the latter not having much effect on the grand totals) is of such importance that it appears in full elsewhere. [Appears in our Bradford correspondent's letter in this issue.—Ed.]

The surprise to all concerned is the quantity of Merino available, particularly in the combing section, and might have had some effect on values ruling if such had been publicly known.

Wool for the Continent.

Details are to hand by the last English mail concerning the sale of wool to Poland. A contract was signed for the supply of Poland of Government wool to the value of £1,100,000. The total consignment will comprise between 35,000 and 36,000 bales, mainly crossbred wool, and a fair quantity of Merino. Shipment will commence at an early date. The sale represents a cash transaction so far as the Department of the Ministry of Munitions is concerned—the British Treasury paying on invoice value as required. This procedure was followed two months ago in the case of the purchase of wool to the value of £820,000 by Austria. The Polish Government in respect of payment has given bonds to the amount of £1,500,000, the balance to be paid in other commodities.

chiefly leather for belting. So far, only Austria and Poland have participated in the credit scheme for wool supplies. Germany has not been included, the supplies of raw wool reaching that country being mainly through Holland and other neutral countries. The Polish representatives concerned in the contract state that the quantity of wool involved in the deal will suffice to restart the wool textile industry and keep it going for eight months.

New Zealand Sales.

The first wool sale at Dunedin since the waterside workers' strike, which is estimated to have lost the woolgrowers of Otago about £80,000 through the postponement of the sale from 21st February, was held on 15th and 16th March. The bidding was erratic, some lots sold realising above London parity, while many other lots of equal quality were neglected altogether. The proportion sold was approximately 10 per cent. of the offering.

An experienced broker remarked of this sale:—"Twenty years ago the prices were about the same as to-day, but wool could then be produced at half the cost, and the transit charges to London were then 1d. per lb., whereas the transit charges now come to from 2½d. to 3½d., provided the wool is sold within three months, after which time the storage charges become hideous."

Timaru.

At the sale held at Timaru on 21st March, out of 12,000 bales a large number of clips were withdrawn before the sale, and only a small proportion was sold. Prices realised were:—Merino, super, 9½d. to 10½d.; good, 8d. to 9½d.; super albino, up to 9½d.; good, to 6d.; medium, to 5½d.; good three-quarterbred, 4½d. to 5½d.; medium, 3½d. to 4½d.; good crossbred, 3d. to 3½d.; medium, 2½d. to 2½d. A large quantity of scoured drew practically no bids, and no sale was made. A large number of lots only brought bids of 1½d. to 2½d., and bales and pieces bids of as low as a halfpenny.

WOOL ARRIVALS AT SEABOARD IN AUSTRALIA.

From 1st July, 1920, to latest dates.

State.	Date.	Bales.	Bales.
New South Wales ...	March 26, 1921	—	491,794
Victoria ...	April 2, 1921	—	282,998
Queensland ...	Feb. 26, 1921	—	—
Townsville ...	—	64,225	—
Rockhampton ...	—	34,585	—
Brisbane ...	—	133,971	—
			232,681
South Australia ...	March 26, 1921	—	—
Port Adelaide ...	—	113,015	—
Other ports ...	—	20,346	—
			133,361
West Australia ...	March 18, 1921	—	—
Fremantle and Albany ...	—	36,642	—
Geraldton ...	—	17,014	—
			53,656
			1,194,490

AUSTRALIAN WOOL EXPORTS.

From 1st July, 1920, to 31st March, 1921.

Compared with corresponding period last year.

July 1, 1920—Mar. 31, 1921.

Season	1919-20.	1920-21.	Increase.	Decrease.
Bales.	Bales.	Bales.	Bales.	Bales.
New South Wales ...	703,456	475,329	350,066	—
Victoria ...	533,604	382,140	276,692	—
Queensland ...	353,964	254,955	222,645	—
South Australia ...	195,865	129,162	107,776	—
West Australia ...	160,550	127,411	63,065	—
Tasmania ...	30,247	15,916	4,705	—
	1,977,686	1,384,913	1,024,949	—
			Net Decrease, 359,964 bales.	359,964

Considerable quantities of wool grown in some States are shipped from others, therefore the above figures do not show actual production of each State, but the total overseas shipments.

New Zealand Exports from 1st July, 1920, to 28th February, 1921, 297,669 bales. Figures for the same period 1919-20 were 358,251 bales.

South African Wool Market.

The Union Produce Market, Durban, reports under date 17th February, 1921:—Supplies of wool are now coming forward very freely, with the result that large catalogues were offered on the sales this week. We offered 1036 bales of wool on our auction of the 15th inst., of which 600 bales were sold.

The market showed a decidedly easier tendency, owing to the American buyers having now completed their orders, particularly for average wools, which registered a decline in values. We obtained 14½d. per lb. for a very nice clip belonging to Mr. I. S. Rautenbach, of Bethlehem district; 12½d. per lb. for Mr. John J. Uijis, and 12d. per lb. for Mr. G. J. Krogman, both of Harrismith district. These wools had splendid length of staple, and were well prepared for market.

Old Season's Wool.—Negotiations with Germany having proved unsuccessful, the British Government has offered to buy up to 100,000 bales 1919-20 season's clips at present unsold at Union ports on basis of 1913-14 prices. Should any profits be realised on resale of wool purchased 50 per cent. thereof after expenses have been deducted will be returned to the sellers. [This 100,000 bales was taken in payment for a large quantity of electrical and railway machinery purchased by the South African Government.—Ed.]

4th March, 1921.

The market this week was very depressed, the few buyers operating having limited orders on a low basis of values, and consequently only small quantities of wool were sold. Indeed, it is very difficult to obtain offers for some of the inferior wools at all. We offered 837 bales of wool on our auction of the 1st inst., of which about 250 bales were sold. Prices for good combings ranged from 8d. to 11d. per lb., whilst average twelve months wools are from 5d. to 7d. per lb. Good lots of short lambs, also bellies, were in keen demand, and realised satisfactory prices.

Our English Wool Letter.

(Specially written for "The Pastoral Review.")

LONDON, 17th February, 1921.

Unsatisfactory Position of Everything.—Home Trade Still Stagnant.

Since last writing many things of real interest to readers of The Review have happened in the wool trade, and it can honestly be said that many here are as gravely concerned about the future of growers' interests as they are themselves. Things are now in such a condition that the assistance of everyone is needed to stem the downward trend of prices, and to regalanise into activity the whole wool industry. It is a pity that this should be, but apparently little is happening at the consuming end of the trade to give rise to a greater demand for wool, and thereby bring about a stabilisation of values. The feature of the month has been the activity on American account, but the question is, will it last? Everybody knows that America is not in need of wool; in fact, stocks were never larger across the Atlantic than they are to-day, and with the output of American mills being much less than normal—only about half—buying is solely speculative in anticipation of the imposition of import duties on colonial wools. The majority at this end of the trade regard the American buying as a

QUIBELL'S Improved Powder Sheep Dip
GIVES THE BEST RESULTS.

Throughout the West Riding 75 per cent. of the mills are now only running two or three days per week. The same conditions have obtained in France, and anything but cheering reports come from Germany, while conditions in Holland and Sweden are disappointing. Is it likely that any firm with no orders on their books and with colossal stocks of dear pieces will want to buy? To the writer it seems as if far too much has been made of the big stocks of old Government wool, and far too little of closed Continental markets. The trade to-day is not suffering from over-production of either wool or woollen fabrics, but under-consumption, and if the directors of B.A.W.R.A. want to see wool values stabilised, let them bend their energies towards opening out the closed markets in Central and Eastern Europe. The writer has always maintained that that is the crux of the whole problem. Everyone who comes back from Germany, Russia and the Balkan States says frankly that the people are in rags, and any material that can be laid hands upon is being used for clothing. It does seem an appalling situation that 75 per cent. of the manufacturing machinery of the world is standing, when about 250,000,000 people are actually starving for the want of clothing. There has been, and is, talk galore about credits, but every export house wants something tangible, and hundreds of firms would be prepared to give six to nine months' credit to Continental buyers if they felt that in doing so their capital was safe. It seems to many

Table showing the quantity of Wool afloat for all oversea ports.

Ship.	Destination.	Date of Departure from last Aust. Port of Calling.	Shipped from—						Arrived at Port of Destination.		Afloat. Bales.
			N.S.W. Bales.	Vict. Bales.	Q'land. Bales.	S. Aust. Bales.	W. Aust. Bales.	Tas. Bales.	Date.	Bales.	
Port Chalmers	United Kingdom..	Dec. 2, 1920	400	..	7,697	..	..	..	Mch. 9	8,097	..
Palma ..	London and Continent ..	" 24 "	98	..	13,536	..	..	..	" 4	13,634	..
Borral ..	United Kingdom	Jan. 7, 1921	202	4,373	1,946	3,640	..	..	" 18	10,161	..
Australbrook	New York ..	" 14 "	1,090	6,057	..	..	..	..	" 21	7,147	..
Elsmaren	Continent..	" 14 "	9,358	2,176	..	712	..	..	" 19	12,216	..
City of Newcastle	United Kingdom	" 15 "	..	4,416	3,270	..	760	..	" 12	8,446	..
Somerset	"	" 15 "	435	1,521	..	..	..	..	" ..	..	1,956
City of Madrid	Boston and New York	" 17 "	..	..	..	..	646	..	" ..	..	646
Nokatay	New York	" 22 "	3,100	2,523	178	..	..	..	Mch. 7	5,801	..
Port Albany	London ..	" 22 "	375	..	3,991	..	..	..	" 18	4,366	..
Benalla	"	" 31 "	1,137	984	..	1,994	..	..	" 17	4,115	..
Tango Maru	Yokohama	" 31 "	..	..	1,011	..	..	..	" 11	1,011	..
Orsova	London	Feb. 1 "	..	187	1,862	..	323	..	" 19	2,372	..
Westmoreland	United Kingdom..	" 1 "	444	..	4,849	..	..	..	" 17	5,293	..
Port Adelaide	"	" 2 "	117	429	..	..	..	..	" 25	5,446	..
Carina	London and Continent	" 4 "	280	143	..	67	..	1,100	" 31	1,590	..
Eborata	London	" 5 "	..	..	1,770	..	..	..	" ..	..	1,770
Virgilia	London and Continent ..	" 9 "	16,396	1,156	9,899	..	..	..	" ..	..	9,899
Walkawa	San Frisco and Vancouver	" 9 "	4,268	1,713	..	1,364	1,227	..	" 9	17,552	..
Ceramic	United Kingdom ..	" 10 "	789	721	5,082	..	..	..	" 18	8,577	..
Asenea	"	" 11 "	823	1,104	..	1,050	..	..	" 26	6,502	..
Naldara	London "	" 11 "	..	..	3,898	..	..	..	" 18	2,977	..
Port Lyttleton	"	" 12 "	522	451	..	..	110	..	April 1	1,083	3,898
Commonwealth	"	" 15 "	393	18,736	..	..	..	..	Mch. 15	19,129	..
Canadian Prospector	St. Louis and Vancouver	" 18 "	2,881	..	1,572	2,344	..	..	" ..	..	6,797
Argyllshire	U.K. and Continent	" 20 "	7,707	2,856	..	..	..	..	Mch. 21	10,563	..
West Malwah ..	San Francisco	" 21 "	7,733	473	3,737	..	954	..	April 1	5,897	10,933
Mitilades	United Kingdom ..	" 22 "	3,042	7,891	..	..	..	..	" ..	..	..
Port Lincoln	London	" 23 "	1,395	33	1,867	222	309	..	Mch. 26	3,826	..
Ormonde	"	" 23 "	..	55	..	..	..	..	" ..	..	55
Port Melbourne	Boston	" 23 "	3,019	..	..	..	..	..	Mch. 15	3,019	..
Ionoma	Continent ..	" 24 "	3,105	3,238	3,210	752	838	..	" ..	..	11,143
Capodimonte	London and Continent	" 25 "	..	..	1,179	6,819	..	..	" ..	..	7,998
Bilgai	Yokohama	" 28 "	1,722	..	1,848	..	..	..	" ..	..	3,570
Nikko Maru	Continent ..	Mch. 2 "	3,910	457	..	168	..	..	" ..	..	4,535
Palemo	London and Continent	" 2 "	686	..	6,503	..	..	..	" ..	..	7,189
Makura	Vancouver	" 3 "	688	..	4,587	..	..	..	April 2	688	..
Devon ..	United Kingdom	" 4 "	..	..	3,398	..	..	..	" ..	..	4,587
Waihemu	Vancouver	" 4 "	1,303	..	..	..	..	..	" ..	..	4,701
Bel'ana	London ..	" 5 "	588	265	129	826	..	..	" ..	..	1,808
Varkunda	"	" 11 "	1,316	694	..	897	35	..	" ..	..	2,742
Port Augusta	United Kingdom..	" 14 "	1,457	1,152	2,098	..	..	..	" ..	..	4,707
Cornwall	"	" 15 "	2,423	1,285	180	1,259	..	..	" ..	..	5,047
Dan Ronald	London and Continent	" 17 "	5,537	..	2,099	832	..	..	" ..	..	8,468
Australpool	"	" 19 "	289	..	..	..	225	..	" ..	..	514
Coorara	United Kingdom."	" 19 "	349	120	..	1,943	601	..	" ..	..	3,013
Osterley	London ..	" 22 "	617	194	1,170	29	..	..	" ..	..	2,010
Salatiga	Continent ..	" 23 "	5,426	453	7,295	1,129	..	..	" ..	..	14,303
Bullaran	"	" 24 "	3,486	2,886	92	..	..	..	" ..	..	6,464
Cyclops	U.K. and Continent	" 24 "	..	1,784	3,079	552	..	..	" ..	..	5,415
Valotapu	San Francisco	" 24 "	..	11,223	..	..	..	..	" ..	..	11,223
Medic.	United Kingdom..	" 25 "	2,774	912	3,423	..	..	..	" ..	..	7,109
Port Stephens	London	" 31 "	2,418	2,960	1,103	..	..	..	" ..	..	6,481
Totals			164,728	158,986							

that if B.A.W.R.A. will try to pave the way for selling woollen fabrics to the starving population of Europe, wool prices would begin to put themselves right in a short time, and without any assistance from anywhere else. Is it not better for growers to sell that portion of their new clip wools which the trade wants, than to refuse to meet the market? After all, prices for good combing wools to-day are not so bad.

Financial Difficulties.

Another important fact which the B.A.W.R.A. seem to have overlooked is the question of finance. Every firm in this country is exceedingly hard up, and but for the banks helping their customers, there would be many failures. The Lord Mayor of Bradford, at a private gathering of the members of the trade last week, when asking for subscriptions for a war fund, said that one of his friends, who had been a very ready and liberal supporter of every deserving war fund in the past, told him frankly that whereas he was worth £60,000 a year ago, owing to the shrinkage in the value of stocks, he doubted if to-day he was worth £5000! That is a typical case, and the fortunes made during the war have disappeared like dew before the rising sun. Before many months have passed, we believe that the directors of B.A.W.R.A. will be compelled to make a big effort to open out trade with the countries of Europe. Wool users would be only too glad to buy every class of raw material if there was enough trade to justify such an action, but millowners are at their wits end to know what to do, and not half the machinery in the West Riding is running even two to three days per week. No living man has ever known such conditions as obtain to-day in the textile world, the standing machinery being the direct cause of wool stocks accumulating.

The Outlook.

After reading the above, readers of "The Pastoral Review" will regard the outlook as anything but cheering. The only important business placed during the past month has been some khaki orders, presumably for Russia. Some firms, however, notwithstanding they are very quiet, and would welcome some orders, have refused this khaki trade. It is commonly believed that the khaki is going to Russia through neutral countries, all for the purpose of clothing Bolshevik troops for another spring campaign. The goods have to be all delivered by the end of February. Everybody would only be too glad to start working for the civilian population of Russia, but khaki smells too much of fighting to be welcomed. As Mr. Harry Dawson says, there can be no radical improvement in trade until costs of production decline, and Continental exchanges are more reasonable. That is the crux of the whole question. If the rates of exchange could be modified, trade would revive, but with colossal piece stocks everywhere, and these having declined anywhere up to 22s. per yard on an 18-oz. blue worsted serge, the outlook is anything but good.

Amalgamation of Producers' Organisations.

We refer in our editorial columns to a scheme put forward by Mr. J. W. Allen, secretary of the Graziers' Association of New South Wales, for the amalgamation of producers' organisations, and recommend it to all men on the land.

Mr. Allen has submitted a memorandum on the subject to the executive of the Graziers' Association, who have decided to place it on the business paper for the forthcoming annual conference of the association, and to place it also before the Graziers' Federal Convention. The gist of the memorandum is as follows:—

The advisability of endeavouring to bring about an amalgamation between the various associations of primary producers has been suggested from time to time, and was definitely raised at the conference convened by Mr. James Kidd in October 1917 (the outcome of which was the formation of the Producers' Associations' Central Council), and also at each of the three annual conferences of this association, but upon each of these occasions the proposal has been considered impracticable.

Whilst I believe that the view hitherto taken has been correct, I am of opinion that the conditions have now so materially

altered that the question of a straight-out amalgamation might with advantage be discussed at our forthcoming annual conference, and that it would be desirable for the executive to place on the agenda paper an item of business, such as the following:—

"That this conference highly appreciates the closer unity of the part of primary producers which has within recent years been achieved through the establishment of the Producers' Associations' Central Council, and considers that it is desirable that still closer unity should be brought about by a definite amalgamation of all associations representing primary producers in New South Wales; with this end in view the conference extends a very cordial invitation to the Farmers' and Settlers' Association of New South Wales, the Primary Producers' Union, the Stock owners' Association of New South Wales, and the New South Wales Sheepbreeders' Association to appoint representatives to meet representatives of this association, for the purpose of discussing the advisability and practicability of bringing about an amalgamation of these organisations, and the terms upon which such an amalgamation could be effected.

"That Messrs. — be appointed to represent this association at the proposed conference with representatives of the other organisations, it being understood that any scheme of amalgamation which may result would require to be submitted to a general meeting of members of the association in order to be carried into effect."

The advantages which I anticipate from an amalgamation are:—

1. There appears to be a growing objection on the part of producers to contribute to more than one organisation for preservation of their interests, and as the tendency towards "mixed farming" is becoming more and more general, there is undoubtedly a certain amount of overlapping in the work undertaken by the different associations. If an amalgamation were effected, producers would only require to contribute to one association, which would be in a position to act with increased strength for the protection of their interests.

2. The Central Council of the Amalgamated Associations could deal with all matters of general interest, and it would probably be advantageous for distinct departments to attend to matters of particular interest; pastoral, agricultural, and dairying departments might be established.

3. The A.W.U. has for a number of years past claimed to represent all classes of rural employees, and now boasts a membership of more than 100,000, and contemplates an amalgamation with other organisations in the "One Big Union" movement which would have the effect of nearly doubling its membership. The A.W.U. is admittedly the industrial and political opponent of all primary producers, and from this point of view it is manifest that the closest possible unity on the part of producers should be secured for the defence of their interests.

4. The A.W.U. has now become so strong that primary producers will only be able to protect themselves in the event of industrial trouble by self-help and co-operation, rendering them in case of trouble independent of union labour, although it is only suggested that this independence should be utilised when union workers refuse to work upon award terms, or—in the absence of an award—upon reasonable conditions.

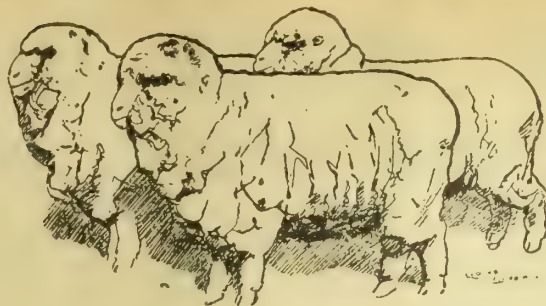
5. Throughout Australia producers are rapidly gaining political power, both in the State and Federal Parliaments, and this form of activity can undoubtedly be strengthened and rendered more effective by an amalgamation of primary producers' organisations.

6. Some difficulty has been experienced in securing good attendance at the local country meetings of the various organisations, but if an amalgamation took place much better results in this direction could be anticipated. Qualified paid officers could, if thought desirable, be appointed at some centres, and organisers could be regularly employed, and would be able to appeal to all classes of primary producers.

7. Special attention could be paid to publicity matters by a strong amalgamated organisation, and a gain might be made by concentrating legal, taxation, and other such work in the hands of specialists.

8. Offices might be secured for the amalgamated organisation, with special sets of rooms for each department, so that the officials would be readily in touch with one another.

These appear to be some of the advantages which ought to be gained by an amalgamation, and it is difficult to see any corresponding substantial objections if a working basis could be agreed to by the associations concerned. Some difficulty would probably be met with at the outset in arriving at a suitable basis of finance, both as to collection of contributions and as to allocation of expenditure, and this would be the more likely to arise in matters of Federal concern unless the Producers' Associations of the other States followed the lead of this State, and also brought about an amalgamation of their interests and then linked up through a federation of the associations of the Commonwealth.



Winchcombe, Carson Ltd.

are Pastoral Agents in every particular. They sell—

Wool
Fat Stock

Store Stock
Stud Stock

Station Properties
Station Produce

The business is actively conducted by the Managing Directors. Each department manned by specially-trained men, experts in their respective branches.

Winchcombe, Carson's Authorised Capital is £400,000—Subscribed and Paid-up £205,755. The firm's warehouses in Sydney and Brisbane are most up-to-date, being specially designed and built for the rapid receipt, storage, and display of wool.

For 20 consecutive years Winchcombe, Carson Ltd. have sold more wool on the Sydney market than any other firm in the trade.

Head Office:
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Bone Weakness in Lambs IMMEDIATELY CURED.

Lambing ewes require a Lick with a big percentage of sterilized Bone Meal to build strong, healthy lambs. Bone Meal is an absolute essential at this time of the year.

Throughout Victoria and parts of New South Wales big quantities are being used at the present to satisfy what has almost become a disease amongst many flocks.

Want of Bone Meal simply means that lambs will not mature properly, and do not get the big strong heavy frames necessary for high values later on.

Only a limited quantity can be eaten by sheep at a time of—

The Genuine—H. C. Carter's—
Original Medicated Salt Lick **£9/17/6 Ton**
(2240 Lbs.)

For the simple reason that the medicants and ingredients satisfy their cravings quickly, and it does not include any "sweet attractions" such as Molasses to attract sheep to eat it. The object of a true medicated lick is not to give them a daily feed of lick to live upon, as it costs money, but for them to have their daily feed of grass which costs nothing. The Lick is to protect them from disease, and enable young, growing sheep to develop large frame and sound constitution on country deficient in necessary properties.

Packed loose in bags like Common Salt,
ready to be put straight into Troughs.

A Salt Lick for Lambing Ewes to eat heavily is—

Molasses Salt Lick

This is a splendidly-proportioned Medicated Lick, saturated heavily with Molasses. It will FATTEN sheep very quickly, and makes rich milk for Lambing Ewes, and is eaten very readily when stock get free access to it. It is in big demand for Sale Sheep, not only for its quick fattening properties, but health and internal condition combined produces the wool that buyers chase after.

Young, growing sheep develop heavy bone and big, sound frame. Well-nourished and cared for sheep show their appreciation in the Sale Yards and Wool Sales, but they must be protected and cared for whilst young. It is too late afterwards.

Lambing Ewes particularly require a Salt Lick, and owing to its sweetness lambs quickly learn to nibble at Molasses Salt. It is therefore made of very Small Grain Crushed Salt so that growing Lambs have no difficulty in mouthing it. It is not stuck together in any way, instead, it is loose and friable. Furthermore, being of small grain it enables it to become more thoroughly saturated with the Molasses and medicants, and it prevents it from being wasteful in use by dropping from the sheep's mouth.

This is one of the well known H. C. Carter's formulae.

Price - £10/7/6 Ton.

Bone Meal used in Carter's Licks (both Medicated and Molasses) is from freshly slaughtered bones, twice oven cooked under intense heat, and ground to a very fine powder so as to digest immediately. Beware of lumpy Bone Meal, even though small, as instead of digesting it becomes an irritant in the stomach whilst digesting, often remaining a week at a time. Carter's Bone Meal is in the form of a powder, and there is a GUARANTEED PERCENTAGE of NOT LESS THAN 10% of this BONE MEAL in every bag of SALT LICK.

Put back into the original Salt Bags after mixing to save the heavy cost of new bags. If packed in new bags, 20/- ton extra.

F. W. WILLIAMS & CO. LTD.

41 Hunter Street, SYDNEY—and—486 Collins Street, MELBOURNE

BOWEN MEAT WORKS BERGL AUSTRALIA LIMITED

Proprietors

Situated on the Railway Line at Merinda, six miles from Bowen Wharves.

Buyers at "per head" or "by weight" of **FAT CATTLE** suitable for the Meat Export Trade.
Producers and Exporters of **MEAT WORKS PRODUCTS**, including **Frozen Meat, Canned Meats, Extract of Beef, Tallow, Fats, Oils, Hides, Manures, &c., &c.**

Live Stock, Insurance, Shipping and General Commission Agents,
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Ship Owners, Freight and Insurance Agents.

AGENTS—

HOULDER LINE LIMITED—Refrigerated and Passenger Steamers.

EMPIRE TRANSPORT COMPANY LTD.

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RANSOMES & RAPIER'S ABSORPTION AMMONIA REFRIGERATING MACHINES.

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THE
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ENSURES
MORE MEAT
MORE WOOL

Puritas Disinfectants
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Agents for Victoria, N.S.W., Queensland—
T. S. BEAUMONT & SON, Wool Brokers,
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H. DAWSON & CO., Wool Brokers,
Dunedin.

**The Gladstone Meat Works of
Queensland Ltd.,** Gladstone,
Queensland.
BUYERS OF FAT STOCK FOR EXPORT.

Meat and Produce Trades.

Position and Prospects in Australia.

The Season.

The northern and central areas of the continent, in which are included Queensland, the Territory, the greater part of New South Wales, and the north of Western and South Australia, have received moderate to heavy rains during the past month. These should be sufficient to assure growth of feed well into the winter, and make the seasonal outlook generally satisfactory. Indeed, so far as north and west Queensland and the Territory are concerned, it is a long time since the country looked so well. Feed is in abundance, and judging by present appearances those graziers who think it advisable to hold their stock until the markets improve should be able to do so comfortably.

Conditions in the south are hardly so favourable. Up to the time of writing proper autumn rains have not put in an appearance, and as a result pastures are more or less dry. There is still feed of a sort about, but a good downpour is urgently needed to bring on new growth before the weather becomes cold.

Current Operations.

Queensland is the only State in which the works are treating stock for export to any extent. A few head may be going through in New South Wales, but in Victoria and South Australia the trade has absolutely shut down for the time being. What is more, there is little chance of the works opening again before the spring, unless a dry spell or something very unexpected happens. Although sheep are to-day selling cheaper than for many months past, the uncertainty of the London market, difficulty in disposing of by-products at any price, together with abnormal freights and high cost of freezing, &c., make operations out of the question.

Practically all the Queensland works are treating cattle, those in the north opening the end of March or early this month. Ross River and Alligator Creek are putting through about 500 head per day, and Burdekin 250 head. Gladstone and Lakes Creek, in the central division, are handling some 200 or more per diem. As regards those located on the Brisbane River, Borthwick's, Q.M.E. and Cooke's are killing up to 300 head a day, but there is a probability of Cooke's closing down the middle of this month. The A.M.E., which had been operating since February, closed on 7th, probably until the beginning of May. After that the future is uncertain, as it is with all the Brisbane works. The beef position is much the same as that described with mutton in the preceding paragraph. The combination of high freights and charges, and relatively low selling values on the other side make the position very difficult. Cattle values are down, but it is open to question whether graziers will be prepared to accept the figure that the companies can now afford to offer. With ample feed in the country many may decide to hold, but on the other hand, some must, for financial reasons, realise. These may keep the works going for a time at least.

In view of the great difficulty in disposing of hides, several of the Queensland companies have lately found it advisable to open up new departments at their works. Some are drying, and others tanning the unsaleable surplus.

Clearances of frozen meat from the Commonwealth to all ports during March totalled 30,583 carcasses mutton, 36,753 carcasses lamb, and 115,327 quarters beef, of which 19,000 carcasses mutton, all the lamb, and 64,552 quarters beef were consigned to Great Britain. Included in the exports were some 1500 tons of beef shipped from Wyndham, W.A., works. This is meat that was treated last season, and which the Government had not been able to get away before. It is understood that there are still a few hundred tons left on hand. Another interesting item in connection with last month's clearances is the shipment of 23,700 quarters of beef

to Genoa, and 9000 carcasses mutton and 22,000 quarters beef to Port Said.

Freight Rates.

Exporters have been advised of a further revision in freight rates for free frozen meat to Great Britain. As mentioned in last issue, the companies the end of February received an intimation from the Imperial Government Shipping Committee to the effect that the charges for March-April shipment would be:—Beef: Equal hinds fores, 115-16d.; ditto, equal hinds crops, 1½d.; lamb, 25-16d.; mutton, 2½d. per lb. all net. These rates, so far as lamb and mutton are concerned, represented an increase on those previously ruling, and which were already considered too high. Protests from the Government and various exporters' and producers' associations were rained on the Shipping Committee and Imperial authorities, with the result that charges were brought back to those ruling in February. The freight until the end of April now will be:—Beef, equal hinds fores, 1½d., plus 10 per cent.; ditto, equal hinds crops, 1½d. net.; lamb, 2d., plus 10 per cent.; mutton, 1½d., plus 10 per cent. It is also announced that on shipments made prior to 5th February and on account of c.i.f. orders booked before that date the above charges are subject to a rebate of 5 per cent., all beef being charged at the rate of 1½d. per lb.

The concession, such as it is, really means very little to the trade in Australia. Shippers of free meat subsequent to 5th February will certainly not have to pay the extra that they were threatened with a couple of months ago, otherwise there is no reduction, except that they will receive a rebate of 5 per cent. on freight paid before 5th February. That charges to-day are abnormal, even for these abnormal times, is shown by the appended table comparing pre-war with the current rates:—

	1913.	1921.
Beef, equal hinds crops ...	¾d. = .563d.	1½d. net = 1 875d.
Lamb ...	1½d. = .688d.	2d. plus 10% = 2.2d.
Mutton ...	¾d. = .625d.	1½d. plus 10% = 2.062d.

Here we see that the freight on beef has been increased by 1.312d. per lb., lamb by 1.512d. and mutton by 1.437d. In other words, the current charge is to-day in all cases nearly three and a-half times that of 1913.

It is contended on the part of shippers that these charges are so high that the trade is in danger of being strangled. The Imperial control over refrigerated freight ends 30th April, and the rates fixed after that date by shipowners are a matter of vital interest to graziers as well as the meat companies. Free market conditions have already been restored in Great Britain, and there are not wanting signs that values are dropping back to something approaching the pre-war level. On the other hand, freights and all other charges remain inflated. Also it must not be forgotten that our meat has to be sold in competition with supplies from South America and other countries that are closer to the world's markets. Stocks from those parts can usually be landed in London quicker and cheaper than from Australia or New Zealand, and a heavy freight now might be about the last straw.

It is not only on refrigerated produce that the meat companies find freight charges heavy. Tinned meats, tallow, and all by-products are subject to very high rates, while selling values, as everybody knows, are about as low as they can possibly be. Herewith are details of the freights prior to the war, compared with those ruling at the beginning of April:—

	1913.	1921.
Tallow ...	47/6 per ton weight	180/- per ton
Hides ...	50/- " (say .268d. per lb.)	1½d. per lb.
Leather ...	60/- " weight	270/- per ton
Cased meat ...	30/- " 40 c. ft.	120/- "

During the last few days an announcement has appeared in the press to the effect that a reduction has been made in the rates on tallow, hides, leather and cased meats. As from 14th April tallow will be 170s. per ton (10s. reduction), hides 1d. per lb. (¾d. reduction), leather 244s. a ton (26s. reduction), and cased meats 105s. per 40 c. ft. (15s. reduction).

Queensland Meat Contracts.

After protracted negotiations an agreement has been reached between the Queensland Government and the meat

companies regarding supplies for the State butchers' shops during 1921. Unlike last year, when 20 per cent. of the total cattle killings of all the works were to be made available, this season the Government is only reserving the right to take 12½ per cent. of the beef output from southern and central works, and 7½ per cent. of the northern establishments. It is provided, though, that those northern companies, with works in the south, are to deliver in the south an extra 5 per cent., which is to form part of the 7½ per cent. provided for delivery in the north. The prices are the same as last year, viz., 3½d. per lb. for frozen beef, and 3d. per lb. for chilled, except that an extra ¼d. per lb. will be paid on the 5 per cent. to be delivered in Brisbane on account of the two northern works. The Government is to pay cash within seven days of delivery, and storage at the rate of 1-24th of a penny per week.



FLEET OF REFRIGERATED MOTOR VANS.

Used by the Metropolitan Abattoirs Board, Adelaide, for delivery of metropolitan meat supply to the butchers' shops.

London Meat Quotations.

The Imperial Government's control over imported meat ended 31st March, 1921. The Incorporated Society of Meat Importers has accordingly started issuing its weekly quotations.

The following have been received:—

April 2.—Canterbury sheep, light, medium, 8½d. lb; heavy, 8¾d. Southland and North Island, 8½d.; ewes, 8½d. Australian sheep not offering. South American, light, 8½d.; heavy, 8d.; ewes, 7½d. Lambs.—New Zealand, transhipped from United States, all varieties, 12½d. lb.; Australian, new season's all 12½d.; South American, light, 1s.; heavy, 11d. Frozen Beef.—New Zealand fores, 5d. to 7d.; Australian, 5d. to 7d.; Argentine, 6d. to 10d.; Uruguay, 5d. to 7½d. Chilled Beef.—Argentine, 7½d. to 12½d.; Uruguay not offering.

April 9.—Lambs.—New Zealand, North Island, new season's, 14d.; Australian, best 13d., inferior 12½d. Frozen Beef.—New Zealand and Australian, 6d. to 6½d.; Argentine, 5½d. to 10d.; Uruguay, 4½d. to 7d. Chilled Beef.—Argentine, 6½d. to 1s.

Australian Frozen Meat Exports to Ports other than in United Kingdom.

(Season taken as from 1st July to 30th June.)

Period.	Mutton Carcases.	Lamb. Carcases.	Beef. Quarters.
Season 1911-12	167,120	26,480	197,479
1912-13	166,474	27,313	206,982
1913-14	224,283	33,529	379,353
1914-15	91,725	806	208,827
1915-16	20,814	10,750	34,902
1916-17	15,785	8,025	13,560
1917-18	320	—	4,171
1918-19	33,039	6,950	26,891
1919-20	154,968	41,612	99,869
Monthly Totals, 1920.			
January	43,402	14,066	5,202
February	26,591	3,511	2,278
March	22,800	2,960	8,671
April	26,330	2,866	5,452
May	2,565	1,032	3,584
June	7,567	9,127	4,111
January to June	129,255	33,552	29,298
July	49,628	2,598	63,707
August	6,305	1,085	1,776
September	4,609	2,675	8,035
October	32,508	1,050	2,307
November	6,186	1,370	6,895
December	1,820	1,619	3,432
July to December	101,256	10,397	86,152
Monthly Totals, 1921.			
January	7,053	7,401	6,534
February	7,420	2,027	4,942
March	11,000	1,790	5,000

New Zealand Frozen Meat Exports to the U.K. (Season taken as from 1st January to 31st December.)

PERIOD.	Mutton. Carcases.	Lamb. Carcases.	Beef. Quarters.
Total for 1911	1,792,067	3,326,843	147,154
Total for 1912	2,360,789	3,191,197	149,397
Total for 1913	2,210,648	3,399,119	147,495
Total for 1914	2,771,102	3,644,777	371,604
Total for 1915	2,929,412	3,806,421	526,119
Total for 1916	2,456,115	3,118,317	727,772
Total for 1917	1,964,530	1,550,712	615,867
Total for 1918	1,348,884	1,317,989	537,017
Total for 1919	3,645,704	3,316,168	554,303
Total for 1920	4,676,575	2,031,473	594,546
Monthly Totals, 1920.			
January	216,214	119,437	20,016
February	256,935	157,578	20,852
March*	243,434	112,624	16,615
April*	189,346	157,159	33,380
May	337,170	228,274	43,255
June	298,874	334,471	45,373
January to June	1,541,973	1,109,543	179,491
July*	519,521	363,743	102,626
August*	177,277	65,391	16,646
September*	453,148	155,064	112,958
October*	623,075	62,754	82,123
November*	598,696	30,854	—
December*	762,885	244,124	100,702
July to December	3,134,602	921,930	415,055
Monthly Totals, 1921.			
January	475,507	5,269	3,179
February	330,321	111,267	63,800
March	358,933	352,377	106,756
Clearances reported for Mar.—			
Mar. 9—Opawa	34,700	27,226	99
„ 14—Waiwera	19,889	20,914	6,715
„ 16—Stuart Star	30,360	12,637	36,075
„ 17—Ruahine	31,348	33,470	5,452
„ 18—Dorset	68,438	17,840	4,889
„ 18—Kumara	37,476	5,484	793
„ 22—Pakeha	13,463	43,809	2,002
„ 22—Hororata	31,022	50,917	4,067
„ 24—Port Lyttelton	17,745	6,827	8,599
„ 26—Viking Star	27,439	24,440	37,314
„ 31—Port Melbourne	46,953	108,823	751
	358,933	352,377	106,756

* In addition to the above, 279,088 carcasses lamb were shipped to U.S.A. in March, and in April 222,568 carcasses lamb to U.S.A. and 6851 carcasses mutton, 11,875 carcasses lamb to Vancouver, B.C., and in July 20,092 carcasses mutton, 360,493 carcasses lamb to U.S.A. In August 6529 carcasses mutton, 596,987 carcasses lamb to New York, 10,060 carcasses lamb to San Francisco, U.S.A., and 3500 carcasses lamb to Vancouver, B.C. In September 21,317 carcasses mutton, 438,544 carcasses lamb to New York, U.S.A., and 60,000 carcasses mutton, 3281 carcasses lamb to Vancouver, B.C. In October 126,914 carcasses mutton, 212,730 carcasses lamb, 591 beef to U.S.A., and 1000 carcasses mutton to Vancouver, B.C. In November 106,426 carcasses mutton, 173,325 carcasses lamb to U.S.A., and 2000 carcasses mutton, 4553 carcasses lamb to Vancouver, B.C. In December 181,913 carcasses mutton, 101,190 carcasses lamb to New York, and 559 carcasses lamb to San Francisco.

Australian Frozen Meat Exports to United Kingdom.

(Only such vessels as have actually cleared the Australian Coast during any given month are included in that month's return.)

	NEW SOUTH WALES.			VICTORIA.			QUEENSLAND. (Including Darwin.)			SOUTH AUSTRALIA, WEST AUSTR. and TASMANIA.			TOTALS.		
	Mutton.	Lamb.	Beef.	Mutton.	Lamb.	Beef.	Mutton.	Lamb.	Beef.	Mutton.	Lamb.	Beef.	Mutton.	Lamb.	Beef.
2000	Carcases.	Carcases.	Quarters.	Carcases.	Carcases.	Quarters.	Carcases.	Carcases.	Quarters.	Carcases.	Carcases.	Quarters.	Carcases.	Carcases.	Quarters.
Jan.	909,604	271,527	16,741	851,034	1,047,182	4,087	78,549	602	429,731	69,901	131,340	276	1,909,088	1,450,851	450,835
Feb.	808,188	294,424	8,477	518,855	735,621	9,074	681,957	40,424	1,046,000	82,582	117,901	2,846	2,091,582	1,188,370	1,066,397
Mar.	1,315,437	403,533	78,195	961,914	1,278,898	115,280	402,486	25,250	1,058,213	18,817	34,216	24,064	2,698,654	1,741,897	1,275,752
Apr.	1,529,702	552,569	135,730	738,774	1,196,410	130,957	628,176	37,301	1,584,946	35,051	81,233	24,396	2,931,703	1,867,513	1,876,029
May	291,486	361,843	551	—	47,546	—	263,565	52	903,582	—	—	—	555,051	409,441	904,133
June	436,943	205,695	54,780	52,927	365,274	20,230	432,571	1,722	1,541,762	—	—	2,622	922,441	572,691	1,619,394
July	81,776	14,052	7,483	48,783	146,903	—	45,026	10	1,399,836	2,212	952	602	177,797	161,917	1,407,421
Aug.	278,980	63,694	5,006	656,677	31,023	2,491	59,837	—	687,473	38,067	21,295	—	1,033,561	116,012	694,970
Sept.	828,413	293,992	21,910	2,251,411	1,526,578	13,559	182,697	1,132	749,998	309,113	95,417	7,162	3,571,534	1,917,119	792,629
Oct.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Nov.	39,006	8,798	803	275,375	203,615	—	—	—	—	5,143	—	—	319,524	212,413	803
Dec.	65,679	11,861	1,609	355,202	172,179	3,350	—	—	—	38,984	24,818	—	459,765	208,858	4,959
Jan.	18,591	5,058	—	16,351	938	—	—	—	—	10,409	—	—	45,351	5,996	—
Feb.	52,771	10,227	319	124,740	47,828	3,822	49,383	22	54,074	—	—	—	228,894	58,077	58,215
Mar.	146,095	28,586	6,758	164,070	85,647	1,029	15,009	—	41,921	50,784	12,426	1,253	375,958	76,659	50,961
Apr.	130,704	30,663	12,144	13,262	730	—	—	—	45,734	—	—	—	143,966	31,393	57,878
May	452,746	95,193	21,633	949,000	460,937	8,201	64,392	22	141,729	105,320	37,244	1,253	1,571,458	593,396	172,816
June	21,072	8,531	—	52,112	8,077	—	—	—	34,279	30,757	173	—	103,941	16,781	34,279
July	8,914	2,077	—	33,561	32,088	7,503	793	—	49,216	20,309	4,840	—	63,577	39,005	56,719
Aug.	11,083	12,361	52	167,394	59,451	1,583	—	—	127,163	3,580	477	15,308	182,057	72,289	144,106
Sept.	14,791	325	—	56,140	19,809	1,833	—	—	104,018	4,853	5,639	—	75,784	25,753	105,851
Oct.	25,741	1,100	679	5,826	2,754	52	—	—	—	4,141	864	634	35,708	4,718	1,365
Nov.	1,618	5,933	—	2,100	149,451	—	—	—	58,954	13,850	128	—	17,568	155,512	58,954
Dec.	83,219	30,327	731	317,133	271,710	10,971	793	—	373,930	77,490	12,021	15,942	478,635	314,058	401,574
Jan.	9,720	21,717	752	3,854	76,246	—	—	—	58,271	1,345	1,946	—	14,919	99,909	59,023
Feb.	29,365	73,814	6,948	509	35,239	—	—	—	134,320	—	—	106	29,964	109,053	140,774
Mar.	11,988	28,893	4,138	—	—	—	4,028	6,267	39,366	—	—	21,048	19,016	35,163	64,552
Apr.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
May	—	—	—	—	—	—	—	—	21,495	—	—	—	—	—	21,048
June	—	—	—	—	—	—	—	4,949	853	—	—	—	—	4,949	853
July	3,910	14,786	488	—	—	—	—	—	9,640	—	—	—	3,910	14,786	10,128
Aug.	11,078	14,110	3,650	—	—	—	4,028	1,318	7,378	—	—	—	15,106	15,428	11,028
Sept.	14,988	28,896	4,138	—	—	—	4,028	6,267	39,366	—	—	21,048	19,016	35,163	64,552

1921.

TO OTHER PORTS.

Feb. 23	Sonoma	From New South Wales: 100 carcasses mutton, 3020 quarters beef, to Honolulu.
March 1	Houtman	From New South Wales: 40 carcasses lamb; from Queensland: 61 quarters beef—to Batavia.
3	Matnam	From New South Wales: 1519 carcasses mutton, 1000 carcasses lamb; from Queensland: 1701 quarters beef—to Singapore.
4	Devon	From Queensland: 22,064 quarters beef to Port Said; 23,713 quarters beef to Genoa. From New South Wales: 4194 carcasses mutton to Port Said.
4	Morinda	From Queensland: 24 quarters beef to Babaul.
5	Eastern	From Queensland: 250 carcasses lamb, 200 quarters beef, to Manila.
10	Melusia	From Queensland: 52 quarters beef to Rabaul.
23	Osterley	From New South Wales: 4554 carcasses mutton to Port Said; 800 carcasses mutton, 300 carcasses lamb, to Colombo.
31	Kanowna	From Queensland: 100 carcasses mutton to Manila.

The clearances of frozen meat from the Commonwealth to all overseas ports during March totalled 30,583 carcasses mutton, 36,753 carcasses lamb, 115,327 quarters beef, which compared with the output for February shows a decrease of 6801 carcasses mutton, 74,327 carcasses lamb, 30,389 quarters beef.

When placed beside the total for the corresponding month of last year (March 1920) there is an increase of 27,797 carcasses lamb, 106,656 quarters beef, and a decrease of 37,568 carcasses mutton.

An analysis of the various exports for the month under review shows that 19,016 carcasses mutton, 35,163 carcasses lamb, 64,552 quarters beef were consigned to Great Britain; 100 carcasses mutton, 3020 quarters beef to Honolulu; while ports in the East and Continent take the balance, viz.—11,467 carcasses mutton, 1590 carcasses lamb, 47,755 quarters beef.

Queensland sent away 4128 carcasses mutton, 6517 carcasses lamb, 87,121 quarters beef; Western Australia, 21,048 quarters beef; New South Wales, 26,455 carcasses mutton, 30,236 carcasses lamb, 7153 quarters beef.

The shares of the Victorian Co-operative Freezing Company Limited, Bendigo, are reported to be going off freely amongst graziers, &c. Up to 26th of last month £90,000 had been subscribed. The works and plant are to be ready to start treating stock by next September.

Meat Notes.

Exports of frozen meat from South Africa during January were confined to 437 quarters beef.

It is announced by Mr. C. A. McCurdy, British Minister for Food, that imported meat would be freed from control on 31st March.

According to an exchange Germany will require to import 150,000 tons of meat during the current year. She will also need 1,000,000 tons of raw material for the manufacture of oleomargarine.

The Biboohra Meat Works, Cairns district, Queensland, are preparing plans for enlarging the freezing chambers for the 1922 season. The works will then be able to handle a largely increased number of cattle.

"The Review of the River Plate" reports that Messrs. Vestey Bros. are said to have acquired the Rio Grande frigorifico situated near Puerto Alegre, one of the best cattle feeding districts, and an outlet for the large numbers of cattle fattened in that favoured part of Brazil. This latest acquisition by this powerful British firm shows their confidence in the future of the cattle trade in Brazil.

The report of Armour and Co., Chicago, states that it was only by drawing on reserve funds accumulated by its foreign connections that it was possible for the company to show a net profit

on business for 1920. The total sales for the year approximated £180,000,000, and the net profit is shown as £1,062,000. The net income represents about 2.4 per cent. return on the net capital invested.

A recent advice states that the Uruguayan Chamber of Deputies is considering a project for calling a conference of representatives of Argentina, Brazil, Paraguay, and Uruguay to study the best means by which the Governments can take over the packing house business and operate same for the benefit of South American cattle breeders. At present most of the meat works are in the hands of the American "big five."

The Federal executive of the Australian Meat Industry Employees' Union has drawn up a scheme of closer organisation by the amalgamation of the Meat Workers' Union, Federated Cold Storage and Meat Preserving Union, and the Meat Packing and Tin Canning Employees' Union. The scheme was submitted to a combined meeting of the members of the unions in Sydney, which decided to take a ballot of the employees on the scheme.

The extent to which live stock and hide values have fallen in the United States of America since November 1918 is illustrated by a bulletin issued by the National Bank of Commerce. For instance, cattle, which at their highest point since the signing of the armistice sold for 70s. per 100 lbs., were on 15th January only fetching 37s. 6d., and pigs, which reached 92s. per 100 lbs., were down to 34s. 4d. The crest of hide values was 2s. 2d. per lb., and they had dropped to a shade under 9d. a lb.

The Irish Packing Company, whose start of operations was recorded two or three months back, has apparently not had that clear run of uninterrupted business which was anticipated for this promising venture. The reasons for this do not appear, but that they are in some way or other mixed up with political troubles is suggested from headquarters. It is certainly a lamentable thing that at a time when live cattle exports are interdicted because of foot and mouth disease the Irish Packing Company should only be killing 200 or 300 head of cattle per week when it might be at the apex of its activity. The better part of a million sterling has been sunk in the enterprise, but it is understood that the £1 shares were recently unsaleable at 6s.

The New South Wales Meat Industries Board has issued a statement, showing the quantities of frozen meat made available to the public during the shortage of fresh meat experienced between May and September 1920. By arrangement with the Imperial authorities, a stock of about 6,000,000 lbs. of frozen mutton was repurchased and distributed locally, and in addition a supply of 1,666,668 lbs. of mutton was obtained from Victoria and 2,287,337 lbs. of beef from Queensland. A balance of 650,617 lbs. of mutton and 340,708 lbs. of beef left on hand when the shortage ceased was shipped to the Imperial Government. The cost of the purchases was £251,296, and, the board having acted entirely in the public interest, the complete accounts revealed a profit of only £100.

South American Cable Service.

(FROM OUR OWN CORRESPONDENT.)

SOUTH AMERICAN FROZEN AND CHILLED MEAT EXPORTS.

Period.	Mutton.	Lamb.	Beef. Qrs.
Total for 1911	3,048,262	1,092,155	3,807,320
" 1912	2,500,000	815,000	4,030,000
" 1913	1,909,061	671,290	4,477,160
" 1914	1,878,578	805,296	4,375,019
" 1915	921,436	442,132	3,531,842
" 1916	1,190,524	637,160	3,650,000
" 1917	783,250	408,250	2,795,500
" 1918	1,272,717	236,822	6,081,660
" 1919	1,462,366	216,014	5,119,928
" 1920	1,393,923	527,317	4,804,562
Monthly Totals—1920.			
January	95,487	7,616	419,810
February	124,306	22,836	419,027
March	76,952	3,271	473,444
April	108,578	69,594	420,881
May	25,600	52,000	174,500
June	45,000	92,000	375,000
January to June	475,923	247,317	2,282,662
July	223,000	50,000	432,900
August	145,000	27,000	527,000
September	182,000	44,000	435,000
October	184,000	59,000	466,000
November	78,000	18,000	262,000
December	106,000	82,000	349,000
July to December	918,000	280,000	2,521,900
1921.			
January	91,000	64,000	308,000
February	120,876	129,266	422,551
March	89,800	160,800	425,000

Position and Prospects in New Zealand.

(FROM OUR OWN CORRESPONDENT.)

CHRISTCHURCH, 1st April, 1921.

Since its inception the frozen meat trade has had many ups and downs, generally of a more or less temporary character, but the present position is causing more anxiety than did the commencement of the late war. The difficulty is that only those "in the know" can understand how matters really stand, and the result is that there is great doubt on the part of sheepowners how to shape their policy; whether to sell at present low prices or to make provision for holding. Some farmers are having their sheep and lambs frozen and stored. There is a general hope that matters will right themselves before long, but when that time will be is apparently very doubtful.

There is not only the unexpected arrival on the London market of New Zealand meat sent to New York and Vestey's shipments, but the New Zealand works are now holding large stocks, and it is estimated that by the end of April there will be in store, exclusive of meat for which shipping has been provided, over 5,000,000 freight carcasses.

There is room for a greater supply than this, but it is a question whether the meat should be withheld from the London market in view of the uncertainty of the market prospects next year. If owners decide to hold their stock rather than sell at present prices, the feed question will be rather a difficult one, as the dry weather has continued so long into autumn that there can be little growth in the pastures from now onwards.

Reduction in Freights.

The farmers' real grievance, no doubt, lies in the greatly increased charges now incurred before meat can be placed upon the London market, where prices are approaching the rates ruling in 1914. Freezing charges were increased at the beginning of the present season, but it is in shipping freights that the charges are the heaviest. Meat before the war could be shipped Home for a little over 1d. per lb., and now it costs nearly 4d. In January last the Prime Minister, who has fought hard to get freights reduced, was promised a reduction, but only a few weeks ago he received word that there was instead to be an increase. A public cable message came shortly afterwards that one shipping line was cutting meat freights, so that there was not a great deal of surprise when the Prime Minister received the following cable message from the High Commissioner dated 21st March:—"I am now informed by the Ministry of Food that they will allow the rates quoted in my telegram of 5th January, namely, mutton, 1½d.; lamb, 2d.; beef, 1½d., all plus 5 per cent., to apply to all shipments from the commencement of the season up to the date of the withdrawal of these rates, and in any case where a c.i.f. sale had been made prior to withdrawal. In respect to other shipments, up to termination of the Government contracts with shipowners, the rates will be:—Mutton, 1½d.; lamb, 2d.; beef, 1½d.; all plus 10 per cent. The reduction amounts approximately to 5 per cent. all round on the rates recently fixed."

This is a step in the right direction, but not nearly far enough to make a very great difference in the value of fat stock. The Prime Minister has also been informed that a general reduction in cargo rates has taken place, ranging from £1 12s. 6d. to £4 10s. per ton, and applies to hemp, tallow, pelts, hides, kauri gum, flax, preserved meats and other lines of outward cargo. There is a feeling among farmers that freezing charges must also be reduced, but it is doubtful if anything can be done until next season, when a reduction of the present high scale of wages for freezing works' hands will probably be asked for.

Drop in Local Prices.

As showing how great and sudden the drop in the value of fat stock for export was, the following buying quotations,

ZWANENBERG LTD.

(Established in London Wholesale Trade over 40 Years.)

**Meat Market Stalls—271, 268, 57 & 6 Central
Meat Markets, London, E.C.**

**Dairy Produce Office—6 Duke Street, Tooley
Street, London Bridge, S.E. 1.**

Cold Stores Oss, Holland.

**Packing Houses—Oss, Holland; Esbjerg,
Denmark; Ireland.**



Zwanenberg Refrigerator Cars with a train load of Pigs for Paris.

We are open to receive consignments of

**FROZEN AND CANNED MEATS, RABBITS, BUTTER,
CHEESE, TALLOW, WOOL, SKINS, HIDES, PELTS, GRAIN,
AND OTHER PRODUCE.**

LIBERAL ADVANCES MADE AGAINST SHIPMENTS
of all kinds of Meat and Produce.

AGENTS WANTED IN AUSTRALASIA.

Bankers—The London Joint City and Midland Bank Ltd., 60 West Smithfield.

Tel. Addresses: "Zwanenberg, London."
"Zwanlim, London."
"Zwanen, London."

Codes: A.B.C. (5th Edn.)
Bentley's.
Western Union

Telephones: City 9160 (3 lines).
Hop 4730 (2 lines).

issued by a leading New Zealand export firm, is of interest, and lamb has since gone even lower than the prices quoted:—

Beef.		Feb. 15.	Mar. 1.
		100 lbs.	100 lbs.
		s. d.	s. d.
Prime ox beef	.. ..	42 6	25 0
Seconds, ox beef	.. ..	37 6	21 0
Prime heifer	.. ..	37 6	22 6
Prime cow	.. ..	25 0	17 6
Seconds, cow	.. ..	20 0	12 0

Lamb.		Mar. 1.
		per lb.
Lamb up to 42 lbs.	.. ..	7½d.
Lamb up to 42-50 lbs.	.. ..	6¾d.
Over 50 lbs.	.. ..	5¾d.
Seconds	.. ..	7¼d.

Wether.		
Up to 64 lbs.	.. ..	3¾d.
64-70 lbs.	.. ..	2¾d.
Over 70 lbs.	.. ..	2¼d.

Ewes.		
Up to 64 lbs.	.. ..	2¾d.
64-72 lbs.	.. ..	1¾d.
Over 72 lbs.	.. ..	1¼d.

Vestey's.

During the recent session of Parliament references were made to the frozen meat market and to the alleged part the American companies were taking at the present time on the London market. The point was emphasised by the Minister for Agriculture that the American market could not be depended upon, and that the London market must be the one that New Zealand must look to. In regard to Vestey's purchase of New Zealand beef, the Prime Minister stated that they were told that this beef was for the European market, but one, if not two, vessels that had arrived in New Zealand in which Vestey's had an interest, were loading this season's new mutton and lamb at the works that this company controlled. This was not fair to other freezing companies or shipping companies. As soon as this came to his knowledge steps were at once taken to reinstate the war regulation, which placed the control of the shipping of meat with the Minister of Customs. Any freezing company desiring to ship meat would have to arrange with the Tonnage Committee, and then notify the Minister of Customs of the boat and the destination of the meat.

South Otago Freezing Company.

Mr. Moore, secretary of the South Otago Freezing Company, stated to a meeting of farmers recently that his company was now in the proud position of being absolutely free of debt, and had a property that could not be replaced for £250,000, all on a paid-up capital of less than £70,000 (reports the "Free Press"). If the farmers of the district supported the company as they should it was intended to have an agent in London, although the company aimed to have ultimately their own office there, with a staff representing either the company itself or a combination of farmers' co-operative freezing companies.

Hicks Bay Works.

The new freezing works at Hicks Bay, on the northern coast of Poverty Bay, which were opened on 1st March, will be able to deal with 1200 sheep and 80 bullocks a day. The freezing chambers are eight in number, each capable of holding 600 sheep. Beef chilling rooms and storage for small goods are also provided. The cold stores will hold altogether 45,000 mutton carcasses. An early start is to be made on the construction of a wharf to accommodate vessels of 1000 tons and under. In the day it will be possible for the largest ships to anchor.

Marlborough's Requirements.

The province of Marlborough has been badly hit by the fall in stock prices, and this has aroused an agitation for more accommodation at the local freezing works. Mr. W. Payne, manager for Messrs. Dalgety and Co. at Blenheim, in an address before the Chamber of Commerce, said that the killing and storage capacity of the freezing works at Picton was quite inadequate, and that the farmers must wake up and go in for fattening instead of sending so many stores out of the district and passing on such a large margin of profit to the more enterprising graziers in the south. The meeting, which was a fairly big one, was much impressed, and the outcome was a resolution to invite the chairman and directors of the North Canterbury Freezing Company

to visit Marlborough and address meetings in various parts of the district, with a view to the extension of its operations to Marlborough. It was generally agreed that, in any case, the Picton works were not suitably situated, sheep having to be travelled from one end of the district to the other. Spring Creek was suggested as a favourable site. It is only fair to the New Zealand Refrigerating Company to say that they intended enlarging the Picton works, but were unable to procure the necessary material, and are now desirous of knowing what quantity of stock will be offering to warrant the company in opening the works in November next season.

Position and Prospects in Great Britain.

(FROM OUR OWN CORRESPONDENT.)

LONDON, 3rd March, 1921.

The Current Situation.

The past month has brought a decided change in the general aspect of the frozen meat market in Great Britain.

This modification, which is one towards a much easier range of prices, as well as all the competitive conditions of pre-war days, is mainly attributable to two causes. On the one hand, the nation has largely got through its war prosperity, and has now got to settle down to its debts, and the British public is realising this. There are more unemployed to-day than there ever were since 1909, and this alone would straighten the meat demand.

On the other hand, we have had lots of meat coming to our shores of late. Some of it was intended for European ports, but these have for some reason or other restricted their demand, and the cargoes have been diverted to our own harbours, with the inevitable result. The consequence has been that pitchings in our markets, which previously went out automatically at maximum prices, are now hanging fire before the none too ready bidding on the part of buyers, and it is fortunate that the unusually dry weather has allowed much of this meat to go in and out of store without the usual loss in condition.

Early last month poorer-class beef from Australia and New Zealand had an unwonted opportunity of disposal during the temporary absence of Argentine supplies, but this did not last for long, and the American operators here are now in possession of ample stocks of both chilled and frozen beef. These are going out at 11½d. for best frozen hinds, and 7½d. for best fores. Anything inferior is classed just now as "Continental" quality, and much of it is so difficult to move that it has to be cut up and hawked off at a great sacrifice.

The fact of there being large quantities of meat also on the way to this country is not without its influence on the market, and there is a determination all round to keep stocks moving.

For all this, the trade is not pessimistic, and one result of cheaper meat will undoubtedly be a very largely expanded consumption.

The frozen meat trade in London and the provinces professes to be greatly surprised at the sight of New Zealand lamb and mutton coming to this country via the United States of America.

It is certainly an instructive spectacle, this quick overflow from a market that was thought to be something approaching the illimitable. More than Englishmen, too, are surprised at the turn of events, as I have heard that prominent States interests have been pursuing some eager inquiries as to what it all means.

Apparently the big American firms are the chief owners of this line of meat now being marketed in Great Britain, though some British firms have also been interested. One British party owning an earlier consignment is said to have made a considerable loss, the quality not turning out well, but the business generally has been transacted without loss.

The main consideration in the eyes of this market is that the Americans are using their ownership of this "colonial" meat supply to knock the bottom out of the rest of the frozen meat market. This they have actually done by letting the lamb ease away to 8s. per stone (8 lbs.) when the maximum stands at 1s. 1d. per lb., and could, in the opinion of many, have been maintained at that level. The "cheap jacks" give the excuse that the impoverished state of the

community is responsible for the drop, but their critics are anxious as to this being the actual cause of the cheapness of the meat. It would seem rather to be part of a deeply concerted plan to prepare the market for such time as cold comes off—which cannot be long now—when the Americans will thus have matters more in their grip as the owners of cheap meat. A large proportion of the New Zealand lambs arriving from America are straights, and have made sales in the poorer stuff here look very sick indeed.

The Americans, too, as the possessors of chilled beef supplies have got the market nicely fixed against frozen beef supplies, which are meeting practically no demand just now. The advent of "colonial" meat on the British market via United States channels is, at least, a novelty, and with the existing abnormal trade conditions here, it is attracting its share of attention. The business cannot have been a profitable one for those American buyers who were left with the New Zealand lambs, for between the prime cost 7½d., freight 2½d., insurance ¼d., return freight and costs 1d., and other incidental expenses, there is practically no margin before the English wholesale maximum selling price is reached.

It is not possible to gain any reliable figure of the extent to which these shipments from America may amount. The extreme figure of three-quarters of a million carcasses, which I have heard mentioned, may perhaps be ignored, but the arrivals will be considerable, no doubt, and the fact that New Zealand shipments due to arrive in England up to Easter are very large, increases the chances of the trans-Atlantic meat.

It is rumoured that there are as many as 300,000 further frozen lambs in New York waiting to come to this country. Most of this is said to belong to the Big Five, although the Big Five are reported to be interested in some of it. All these supplies militate much against forward business here in the Dominion, and at the present time no Smithfield business is keen on c.i.f. purchases, the risk being too great. It is understood that several c.i.f. deals with New Zealand have been cancelled for lack of freight. It seems a great pity that with augmented freights they should be in this position. The Board's say in their annual report refrigerating tonnage appears to be well in advance of the immediate requirements of the trade, and that as soon as the last remnants of Government control are removed, and free competition resumed, freight rates ought to be appreciably reduced. The scarcity of outward cargoes, however, they add, introduces an unfavourable factor into the market for homeward shipments.

It is a noteworthy fact, as one of our trade reports in this issue mentions, that the New Zealand lamb arriving via America is considerably prejudiced by the multiple stamping of the U.S. Government inspection ink label which the carcasses bear. Some holders contrive to slice off this blemish.

The freer arrivals of meat last month largely explain the better position of the market. Altogether 1,174,869 carcasses of mutton arrived, as compared with 731,487 in January. Lamb carcasses to the number of 381,481 arrived, as compared with 392,092 in January. There were also received 496,741 quarters of frozen beef, as compared with 1,152 in January, while the chilled beef arrivals increased in January to 70,847 in January to 111,276 last month. The cold carcasses of the country are, of course, getting more full again after several months of decreased business, and it is anticipated that the further rush of ships during the succeeding weeks will shortly tax cold storage accommodation in this country to its utmost, although this extreme pressure may last for long. By the way, I notice it recorded that cold storage rates are now on the average 122 per cent. higher than they were before the war.

Mr Philip Proctor recently stated to a deputation of the British Meat Traders' Federation that he understood the Ministry of Food would come to an end on the 31st of March next. It has since been denied that this is tantamount to decontrol of imported meat dating from that day, and wisacres in the trade argue that it must come very far to that date.

After 31st March when the Ministry of Food as an institution closes down, and any departments still running will be transferred to corresponding departments of other Ministries, it is presumed that some arrangement will have to be made with the Board of Trade for clearing up the Government business in meat, as several boats with Government

meat are only just leaving on the other side, and probably that meat may not be finally disposed of before May. Maximum prices may fall almost immediately after Quarter Day.

Smithfield Supplies.

During the past month the total supplies of all kinds at the London Central Markets totalled 32,163 tons, as compared with 26,612 tons in the corresponding period of last year, and 34,009 tons during the month of February 1914.

Of the pitchings at Smithfield last month, 4932 tons were of British and Irish beef and veal, mutton and lamb and pork, and 25,205 tons were imported. Australasia's share of the mutton and lamb supply amounted to 7867 tons, and South America's portion of beef and veal totalled 12,426 tons.

The latest prices at Smithfield are:—

Beef—	Per 8 lb. Stone.
Scotch short sides.. ..	12s. 4d. to 13s.
English long sides	11s. 4d. to 11s. 10d.
Mutton—	
Scotch	14s. to 16s.
English	12s. to 15s.
H.K. ewes	8s. 8d. to 10s. 8d.

Maximum prices for frozen meat continue as hereunder:—

Beef—	
Hinds	8s.
Fores	5s. 4d.
Mutton/ (carcase)	6s.
Lamb	8s. 8d.

Conditional Sales.—A Case for Organised Representation.

Among the many orders that the Imperial Government made under existing powers which it possessed for war-time control was the Conditional Sales Order 1917. This was a very essential enactment, designed to outflank commercial "brigandage" flourishing in times of shortage.

In the meat trade, as well as in other industries, the denuded markets permitted lucky holders of stocks to get the thumb on their clients in a variety of ways on account of their possession of stocks of necessary commodities. They could force buyers, for instance; to take along with purchases of the necessary article quantities of less desirable goods, which they could thus unload at a profit, and it was to protect buyers against this method of victimisation that the above-mentioned order was passed. The offence is today becoming a blight on the frozen meat trade. The Americans were and are the chief exponents of this art of commercial legerdemain. With their chilled beef supplies during the past 12 or 18 months they have practised this fine art of compulsion upon their customers, who knew that if they did not buy other less necessary classes of meat from their Yankee suppliers, they would not get the supplies of the nice bright beef for which the trade was famishing.

The Yankees are practising the same art in connection with the New Zealand lambs now coming across the Atlantic, and this comparatively fresh meat is a lever for unloading the staler stuff on those who must have at least some bright stock in trade for their business.

The obvious question of my Australian readers will be: "Well, why is not information given of these illegal practices, and the law invoked against the offenders?" The reply is that it is always most difficult to bring corruption in business to book. Most frequently no written word passes regarding the condition of the sales referred to, yet the buyer knows the condition and submits to it for the sake of his pressing needs. Not in one case out of a hundred would he come forward and "peach" on his suppliers, who thus oppress him, as he would thenceforth be a marked man, and practically wiped out of existence.

For this reason, the pernicious practice of conditional sales proceeds apace, unchecked. The serious part about it is that it operates mostly against the British side of the trade, as the Americans have the most whip-hold by it, and can make it an efficient lever for their monopolistic designs on the trade. To-day it is a real, added weapon in their hands for world supremacy.

Now, let my Australian and New Zealand readers accept a word of advice from me as to how they can help in this matter. In doing so they will be aiding their own business, as it reacts against them in the long run five times out of six.

If on reading these lines, which lay bare this practice, they send this account to their member of Parliament for it to be pressed home on those who are coming as Dominions

delegates to the Imperial Conference in London, they will assure the matter being taken up at that meeting of Premiers, and Mr. Massey and his Australian colleague can compel the Government here to wipe out traces of the stain on our trade.

If it be doubted whether such a result can be achieved in the face of the trade difficulty and secrecy to which I have referred, I would reply that pressure from the Imperial Conference would undoubtedly work the oracle. The Government, if it is hard pushed on the matter, can easily go a step further and make dead-letter legislation a live enactment. They can make the risk greater against offenders, they can ensure immunity for informers, and in several other ways effect an eradication of this trade cancer.

Don't my Australian readers think this effort worth while? A short letter and a postage stamp is all the effort they need expend to help their trade in this matter.

The Past Year's Record.

	Imports.			
	1920. Cwts.	1919. Cwts.	1920. £	1919. £
Beef—Chilled ..	1,014,501	125,583	4,664,473	585,311
Frozen ..	8,844,098	6,366,647	40,473,019	30,018,318
Mutton and lamb..	6,349,708	4,074,956	26,377,652	17,957,556

The total imports of beef into the United Kingdom, including fresh, salted, tinned, &c., constitute the heaviest on record, of which the percentage of chilled is equal to about 10 per cent. This compares with the pre-war proportion of about 60 per cent. The sources of supply of chilled and frozen beef last year were headed by Argentina, whose contributions comprised 66 per cent. of the total imports, the average of declared value of her chilled beef (960,397 cwts.) being 92s. 1d. per cwt., and of her frozen (5,577,021 cwts.) 93s. 1d. New Zealand was the second largest supplier, sending us 9 per cent. (870,988 cwts.) of the total, which was declared of a value of 85s. per cwt. Australia was third, with 8 per cent. (836,989 cwts.), valued at 88s. 6d. The Uruguayan chilled and frozen imports amounted to about 8 per cent. of the whole, her chilled (54,104 cwts.) being declared at 88s. 8d. per cwt., frozen (749,226 cwts.) 91s. 5d. Brazil and South Africa ("Other Countries") furnished about 6 per cent. (585,213 cwts.) of the total supply, worth 93s. 9d. per cwt., the United States' contribution (224,661 cwts.) amounting to 2 per cent., at 100s. 1d. per cwt.

The imports of mutton and lamb were more than two million and a-quarter cwts. in excess of those of 1919, and over one million in excess of those in 1913. New Zealand was the largest supplier, sending us 48 per cent. (3,075,128 cwts.) of the total receipts, declared at 81s. 9d. per cwt. Australia was second with 35 per cent. (2,257,875 cwts.), worth 88s. 5d. per cwt., and Argentina next with 12 per cent. (758,734 cwts.), worth 90s. 8d. Uruguay's contribution, 32,161 cwts., was valued at 87s. 2d. per cwt.

The "Incorporated Society."

The British Incorporated Society of Meat Importers, in its annual report, records the fact that during the past year and following meetings held in Australia and New Zealand and requests by the freezing companies for some action on the part of agents here, a resolution was carried at a meeting of agents that the London tare and draft allowance be abolished. The new situation arising therefrom rendered necessary the amendment of the old forms of contract, and a standard form of contract for the sales of Australasian mutton and lamb had been drafted by the agents after discussions at joint meetings with the c.i.f. buyers.

Firms' Reports.

Gilbert Anderson and Co. Limited. (Americans Hitting "Colonial" Supplies), 2nd March, 1921: "The continuation of the wholesale control price prevents any true forecast of the market, as one grade sells another. It is perfectly clear, however, that the market cannot continue to take large quantities of heavy-grade mutton and lamb at control prices while the American beef is selling at 2d. to 3d. per lb. under maximum. The reshipping of New Zealand lambs from America to this market has also had a weakening effect; the tendency has not been so much to lower the price of lamb, but to restrict the sale of heavy sheep. The forward selling has been greatly restricted on account of the shippers' inability through labour trouble to guarantee shipment."

L. C. Ballantine and Co. (General Outlook not so Satisfactory),

24th February, 1921:—"A considerable change has occurred in our last report. Unemployment has increased throughout the country, and trade in the retail shops has suffered. In turn this is reflected in the wholesale trade, and consequently the demand for meat of all classes has fallen off. In addition, arrivals of Argentine beef are heavy, and New Zealand lambs are arriving from New York in fair quantities. These are now much figured by having the U.S.A. inspection stamp in violet ink imprinted on the carcass in five different places. The general outlook is now not so satisfactory as before."

"The Colonial Consignment and Distributing Company Limited (Home-killed Beef Alone Maintaining Value), 25th February, 1921:—"Home-killed beef is the only class of meat which is maintaining its value; even home-killed mutton and lamb, which hitherto been in moderate demand, is now difficult to sell. This is undoubtedly due to the lower values ruling for all imported meat largely consequent upon general trade depression throughout the country. At the present time frozen mutton generally is plentiful and the demand is inadequate to cope with the supply. There is, however, a scarcity of New Zealand wethers, which restricts controlled price. New Zealand ewes are selling at 7½d. to 7d. per lb. The small quantities of New Zealand lambs that have been pitched on Smithfield market have been ample for requirements. Australian lambs have been more plentiful, but the average quality not good enough for this market. Plate lambs have been much in evidence; some of excellent quality, but the majority very mixed. The outlook for the frozen meat trade is far from promising; we fear that the slump in prices, owing to the presence of too much meat and the curtailment in the spending power of the public, will not be easily overcome, and that lower prices will prevail in the near future."

H. S. Fitter and Sons (A Changed Market), 24th February, 1921:—"A pronounced change has taken place in the condition of the market during the last fortnight, trade having dropped from brisk to very slow. Butchers who were only too glad before to get beef and mutton at maximum prices are now bidding for it, and are able to buy as many lambs as they require. This can be attributed to several reasons. Firstly, it is Lent, during the first few weeks of which the sale of meat always falls. Secondly, several American boats have arrived at once, and have discharged their cargoes of good chilled beef, some of which are now selling at under maximum prices. Thirdly, a large proportion of the New Zealand lambs which were sold to America have now been reshipped to this country, just as the first of the new season's Australian lambs are arriving. Fourthly, people know that there is a large quantity of meat on the water, and are trying to pass their stocks into consumption as soon as possible. Fifthly, the demand on the Continent has been disappointing, and many cargoes destined for abroad have been diverted to the United Kingdom, and last, but by no means least, people simply have not got the money to spend, and are buying as little as possible. It is too early yet to forecast what will happen in the next six months, but we do not hold a pessimistic view of the future."

Gordon, Woodroffe and Co. (Shippers Should Exercise Caution), 24th February, 1921:—"Since writing our last letter there has been a decided change in the supplies of imported meat. Government stocks have been arriving, as was anticipated, in large quantities, and a further development has taken place by the diversion of New Zealand lambs from the United States to America. Further, vessels carrying meat from the Argentine to the Continent have been diverted to the United Kingdom. These extra and unexpected supplies have naturally had the tendency to stop c.i.f. buyers operating for the moment, as they view the heavy stocks at present on hand and to arrive with alarm. Owing to the continued control of meat, frozen meat has naturally not been affected as have been all other commodities, but it would appear to us that a reduction in the prices of beef, mutton, and lamb will take place in the near future, and we would advise all shippers to exercise due caution in their buying operations."

The Frozen Meat Trade in 1920.

Messrs. Weddel's Comprehensive Review.

My trade references this month would be incomplete if I failed to allude to the very excellent Review of the Frozen Meat Trade made, as usual, by Messrs. W. Weddel and Co. Limited, this being the thirty-third of the series. Mr. George Goodrich's pen shows that he takes as keen an interest as ever in the widest aspects of the business. Speaking of prospects for the near future, he says:—

"The prevalence of unemployment in this country makes it likely that the general demand will tend to shrink, especially if prices remain high, though it must be admitted that the rate of consumption in 1920, in spite of these prices, has revealed an unlooked-for degree of latent strength in the home market. It is hardly likely, however, that it will be fully maintained in 1921.

"The Continental demand has been a most erratic factor in

world's market during the past year, and the prospects of settled trade being established there are still remote. Spasmodic inquiries, based to some extent on variations in the rates of exchange, will doubtless continue to have their uncertain influence on available supplies; and while this trade cannot be regarded as a factor in regulating the general level of prices, it is possible at present to place a definite value upon it.

If control of meat prices is taken off in March, there may be a temporary disturbance in the markets; but the world-wide tendency for prices of food and raw materials to recede towards lower levels is not likely to meet with prolonged resistance in the case of meat. Meantime the best hope for any important reduction in prices lies in some curtailment of consumption on the part of the great masses of the people of the United Kingdom."

Discussing the situation in the United States, Mr. Goodsir

it is reported that the United States Government proposes to introduce legislation in the near future having the effect of prohibiting the importation of meat from all sources, including Canada, with a view to fostering their home live stock industry. The large export trade and high prices obtainable during recent years have not been effective in inducing the American farmer to conserve and replenish his stocks, a high tariff is likely to prove much more successful in doing so even if he should succeed ultimately in shifting the burden to the consumer."

Dealing with the increased consumption of meat in Great Britain and on the Continent of Europe, the reviewer attributes it in large measure to the troops having acquired a taste for meat when on active service, and asking for after demobilisation, in preference to home-produced. Mr. Goodsir continues:—

From the point of view of shippers, importers, and distributors this expansion of the public demand for imported meats is a welcome development, and it is hoped that, with fresh supplies being forwarded on private account, there will be a further growth of trade through these new channels."

Australian and New Zealand Produce in London.

LONDON, 3rd March, 1921.

Canned Meats.

In spite of the very considerable reduction in the price of 6's corned beef by the Chicago houses, the demand here has not abated, owing to large shipments of well-known brands of American goods being made to this country at low prices in the United States, where the meat has been sold by the U.S. Government. The owners of the pack here decided to meet this demand, and reduced prices to 70s. for first quality and 55s. for secondary grades, but, I am informed, without any corresponding increase in business. I understand that Sansinena corned beef has been sold as low as 48s., and cheap parcels of poor quality New Zealand at 48s. Large quantities of 12-oz. corned beef sold by the French Government are being offered round at 8s. to 8s. 3d. per dozen. In the present state of the market there are practically, therefore, no market quotations possible. Situations of corned mutton are not so violent, and rates are to be in the neighbourhood of from 60s. to 65s. There is not much demand for meat extract, and prices of first quality are round about 3s. 9d.; secondary grades about 3s.

Butter.

Very large supplies have been coming to hand from Australia and New Zealand during the past month—on Government account. The recent reduction of the retail price to 3s. per lb. by the War Ministry has resulted in increased purchases by the consuming public; in fact, in many shops the butter is being offered for sale at 2s. 8d. to 2s. 10d. Operators here are not inclined to persist pending the lifting of control. Irish is saleable, but at lower prices; Danish also is lower in value. The general impression in Tooley-street is that butter will be about 2s. per lb. retail in the coming summer.

Tallow.

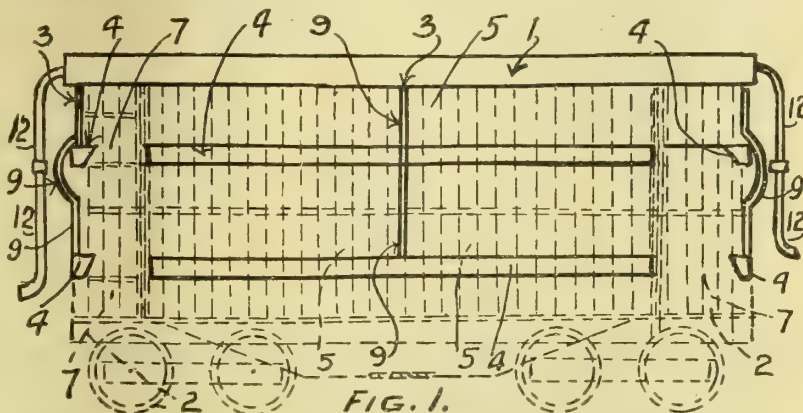
The weekly public auctions of Australasian tallow, which were suspended owing to the bad state of trade, were resumed here on the 16th February. The trade continues very quiet, and at sales prices dropped away about 1s. per cwt. each week. The number of casks changing hands has improved somewhat, but as not been sufficiently large to prevent values sagging. Current quotations are, nominally, as follows:—Mutton: Fine, 43s.; good to fair, 34s. to 40s.; dull to dark, 29s. to 31s.; and hard, 39s. to 41s.; Fine, 40s.; good to fair, 34s. to 37s.; dull to dark, 28s. to 31s.; and sweet, 45s. per cwt.

Utility Page.

Watering Stock in Railway Trucks.

An invention patented by Mr. Wm. Leslie, of 80 Capel-street, West Melbourne, for watering sheep, cattle, and pigs in railway trucks has created much interest amongst graziers and others interested in stock.

The main principles of the invention are shown in accompanying sketch, and consist of an overhead tank running along the whole length of each truck, and connecting by means of branch pipes with the troughs, which are fixed in double tiers at both sides and at each end. Water is taken in from the same tank as the engine receives it, each truck being connected by means of flexible hose. Float valves are provided to maintain the water at a defined level, and to prevent splashing. The invention is now under consideration by the railway authorities with a view to its adoption.



View of Side Elevation for Cattle Truck.

The view of side elevation is given herewith. According to this invention, a suitable tank (1), approximately the length of the truck (2), is arranged preferably inside and along the top, being of suitable width and substantially shallow. Pipes (3) lead from the tank (1) to one or more troughs (4), preferably arranged around the walls of the truck and within each tier (5) or compartment thereof, the troughs (4) extending around the walls (6), except at the portion (7) where the opening doors (8) are provided. The lower troughs (4) are fed by the branch pipes (9), and the inlet orifices (10) are controlled by the float valves (11), so that the water in the troughs is independently maintained at a positive level. In lieu of the floats taps may be provided in the pipe connections to periodically refill the troughs. The main tanks (1) of a train are interconnected by flexible hose or the like couplings (12), the end tank being filled from the engine in any suitable way, if necessary, by pumping from the engine tank so as to fill the whole series of tanks (1) interconnected together.

An Interesting New Paper.

"Imperial Food Journal and Empire Produce News" is the title of a new monthly issued in London under the proprietorship and editorship of Mr. Joseph Raymond. As the name denotes, the object of the paper is to promote inter-Empire commerce in foodstuffs, and the first number, which is recently to hand, bears promise of it proving most useful in this respect. Mr. Joseph Raymond needs no introduction to readers of "The Pastoral Review." His knowledge of the frozen meat and produce trades is unique, and he has the power of using printers' ink in a readable and withal trenchant manner.

Amongst other interesting articles the January issue contains one on "A Self-contained Empire Food Supply," by Mr. George Goodsir, of W. Weddel and Co. Limited. Mr. Goodsir is a great believer in the advantages to the State of having its overseas food supply in the hands of members of the Empire. To have to draw foods from overseas at all in time of war is bad, but to have to rely on foreigners for essentials is infinitely worse.

Another article deals with the "Foreign Monopolist Importer," and describes how the butcher is menaced by the American Meat Trust. It is illustrated by a chart showing the joint interests of the "Big Five," which will be a revelation to those who do not realise the extent of the ramifications of these huge American concerns.



"VALLO"—the Dip with the "STAYING" Power

Have you tried it yet? If not, do so, and assure yourself that Australia can and make a Sheep Dip that is not excelled by any in the world. Ask anyone who has used it whether he knows a better dip than

VALLO POWDER SHEEP DIP

Uniform quality, quick and definite action, and a protecting influence that keeps the sheep clean long after other dips have lost their efficacy are factors that have counted in making "Vallo" so reliable—so popular.

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AGENTS IN ALL STATES



When Conditions are Severe Essex Shows Marked Superiority.



It is a remarkable fact that ESSEX cars, in the recent Royal Automobile Club Reliability Contest, when road and weather conditions were extremely adverse, secured a most decisive victory in each class and displayed abnormal efficiency in every section of the contest, viz., Reliability, Hill-climbing and Petrol Consumption.

RESULTS.

Best performance of the day, both classes, ESSEX, First and Second. Outright Winner, Private class, Mr. Wm. Stuart's ESSEX, First. Outright Winner, Open class, Mr. A. T. Selman's ESSEX, First. Hill Climb, Bulli Pass, Private class, ESSEX, First, HUDSON, Second and Third, ESSEX, Fastest time. Hill-climb Bulli Pass, Open class, ESSEX, Second and Third. Petrol Consumption, Private class, ESSEX, First and Third. Petrol Consumption, Open class, ESSEX, First and Third. In these events the winning ESSEX cars, owned by Mr. Wm. Stuart and Mr. A. T. Selman, did 35.2 and 35.9 miles per gallon, respectively.

All ESSEX and HUDSON Cars secured full points for RELIABILITY.

ESSEX for EFFICIENCY.

"The Car that is light on Tyres."

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STUD STOCK SUPPLEMENT.



NOTICE TO STUD STOCK ADVERTISERS

It is our rule to publish "THE PASTORAL REVIEW" on the 16th of the month, it is necessary that all alterations for the Stud Stock advertisements must be in the printers' hands earlier than the 6th of each month.

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Entirely grass fed and
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"NORTH BUNGAREE" is the Northern portion of the original "Bungaree" run, and was taken over by Mr. M. S. Hawker with his share of the Bungaree Stud and general Flock Merinos in 1906.



4-year-old Special Stud Ram, No. 1. The property of M. S. Hawker, North Bungaree.

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The Manager, North Bungaree, Yacka, Sth. Aust.

Telegrams: North Bungaree, Clare, S.A.

Telephone: Clare, S.A.

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**Special Stud Ram, "Progress" (4 years) by "Perfection 1—Miss Togo.
Bred by Walter Hawker.**

The Anama Merino Flock was established in 1841 by the late G. C. Hawker at Bungaree, and is noted for producing sheep of great constitution and size, being plain-bodied with very valuable fleeces of long combing wool of robust type.

Orders for stud and flock rams booked through The Manager, ANAMA STATION, Clare, South Australia.

Telegrams and Telephone—Clare.

All rams and ewes classed by Mr. H. C. Pennefather.



Special Stud Ewe, "Lady Togo." Cut 20 lbs. 1 oz. wool; Height—Shoulder, 2 ft. 8 in. Rump, 2 ft. 9 in.; Girth, 5 ft. 9 in.; Length, 3 ft. 11 in. Bred by Walter Hawker.

Bred by WALTER HAWKER, Anama, Clare, South Australia

THE BUNGAREE STUD

Stud
and
Flock
Rams
for
Sale

Stud
and
Flock
Rams
for
Sale



BUNGAREE SPECIAL STUD RAM, No. 32.

For particulars apply:—

H. C. & R. M. HAWKER,
Bungaree—Clare—South Australia

SHEAOAK HILLS STUD MERINOS

The property of K. P. P. Sawers.



DAN 5.

These big framed, plain bodied, vigorous constitutioned sheep are grazed on natural grasses only, in a 12½ inch rainfall, and have proved themselves under both adverse and favourable conditions in all parts of the Commonwealth and in South Africa.



WOOLSCOUR 8.

For particulars of Stud and Flock Rams and Ewes, apply to any Live Stock Agents, Adelaide, or to—

Telegrams: Sheaoak, Yarcowie.
Telephone No. 1 Yarcowie

**K. P. P. SAWERS, Sheaoak Hills,
Whyte Yarcowie, South Australia.**

NOW BOOKING.

Collinsville Stud



"Dinkum," Aged 2 years and 2 months. Grand Champion Strong Wool Merino Ram (Unhoused) Sheepbreeders' Show, Sydney, July 1920.



"Broad Charles," Grand Champion Merino Ram (Unhoused) at N.S.W. Sheepbreeders' Show, Sydney, July 1919.



3 Champion Ewes. 1½ years (unhoused) Sheepbreeders' Show, Sydney, 1920.
Left to right—Reserve Champion, Grand Champion, Champion Strong Wool



Grand Champion Merino Ewe (Unhoused) at N.S.W. Sheepbreeders' Show, Sydney, July 1919.



Grand Champion Merino Ewe, 1½ years (Unhoused) Sheepbreeders' Show, Sydney, July 1920

WE ARE ALL CHAMPIONS.

Bred by and the property of

JOHN COLLINS & SONS, Collinsville, via Hallett, South Australia.

To whom apply for particulars for Flock and Stud Rams.

Telegrams: Collinsville, Mt. Bryan.

MOUNT CRAWFORD MURRAY MERINO STUD



CHAMPION RAM LION II.

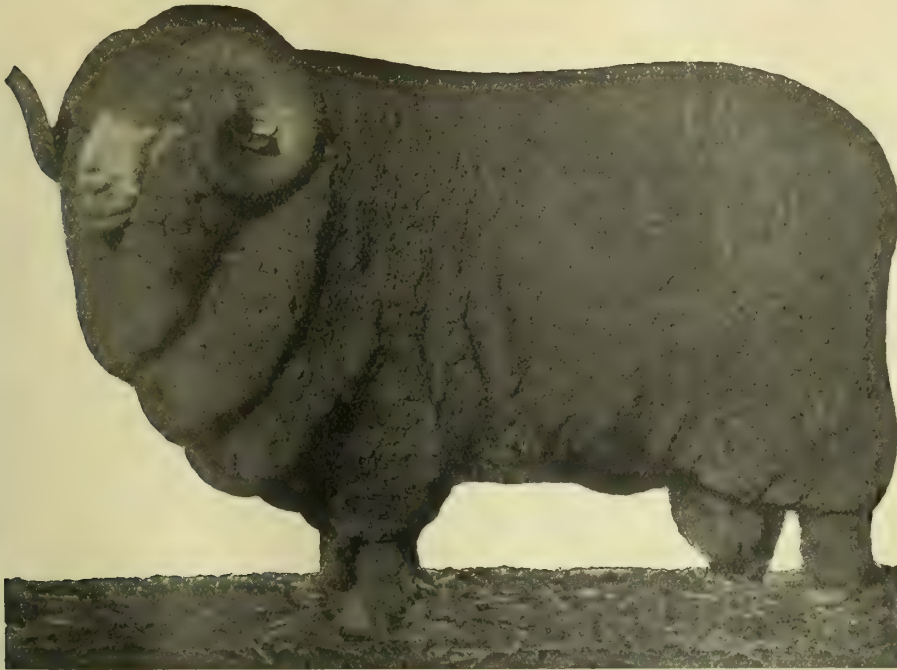
Grazed at large on Naturalised Grasses only and not Lucerne
Bred by and the property of ALICK J. MURRAY, Mount Crawford, South Australia.

— THE MURRAY MERINO FLOCK —
was founded by the late JOHN MURRAY in 1843.

MURRAY Merinos have been INBRED for seventy-one years, and are famous throughout Australia,
New Zealand, and South Africa for their robust constitution, large symmetrical frames,
and heavy fleeces of profitable wool.

FULL PARTICULARS CAN BE OBTAINED FROM—
ALICK J. MURRAY, Mt. Crawford, South Australia.

Rhine Park —and— Cappeedee MURRAY MERINO STUDS.

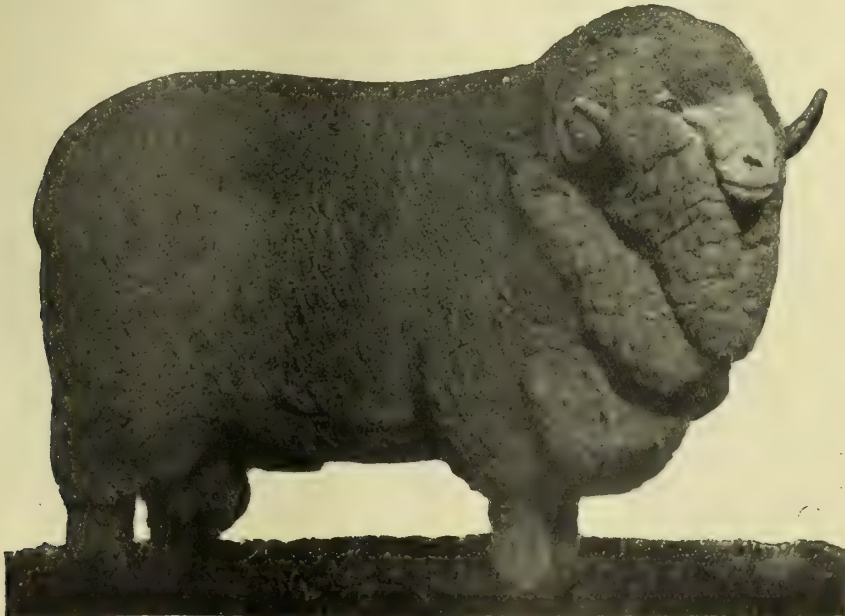


RHINE PARK RAM.

Champion at Adelaide, 1913. 3 years old. Cut fleece 29½ lbs.

THE MURRAY MERINO FLOCK was founded by the late JOHN MURRAY in 1843.

The MURRAY MERINOS have been INBRED for seventy-one years, and are famous throughout Australia, New Zealand, and South Africa for their robust constitution, large symmetrical frames, and heavy fleeces of profitable wool. These Sheep are grazed at large on naturalised grasses only.



2 YEAR OLD CAPPEEDEE STUD RAM, HAIG.

For full particulars apply

MURRAY BROS., Rhine Park, Eden Valley, South Australia
and
WALTER S. MURRAY, Cappeedee, Hallett, South Australia

KOO-OWIE STUD MERINOS

The property of THOS. SANDLAND, Koo-owie, South Australia.

Stud and
Flock
Rams
for Sale.

Stud and
Flock
Rams
for Sale.



Leading Sire "BEATTY."

These sheep have been bred for 30 years in a 15 inch rainfall and are noted for their high cutting value per fleece of long, bold combing wool and carry valuable fleeces into age. Plain bodied, big sheep and great movers.

For particulars apply to—

K. Chester Sandland, Koo-owie, Kooringa, South Australia

CANOWIE STUD

The Stud was established in 1857. Rambouillet Foundation.



Sires Used
have cut
up to
37 lbs.



Stud Ewes
mated
have cut over
25 lbs.



Don Cronje, an Exhibition Ram (by Cronje). Offering Progeny 1920.

STUD AND FLOCK RAMS FOR SALE.

Flock Rams, 4 & 6 guineas. Selected Flock, 10 guineas. Stud Rams, 25 to 75 guineas. Special Studs from 100 guineas upwards.

For particulars apply—

A. G. RYMILL, Managing Director, or A. J. McDonald, Manager, Canowie.
14 Alma Chambers, Adelaide.
Cable—ARTHUR RYMILL, Adelaide.
Hallett, South Australia.

ROSEBANK MERINOS

SOUTH AUSTRALIA

*All Melrose Sheep are grazed on
natural pastures only.*

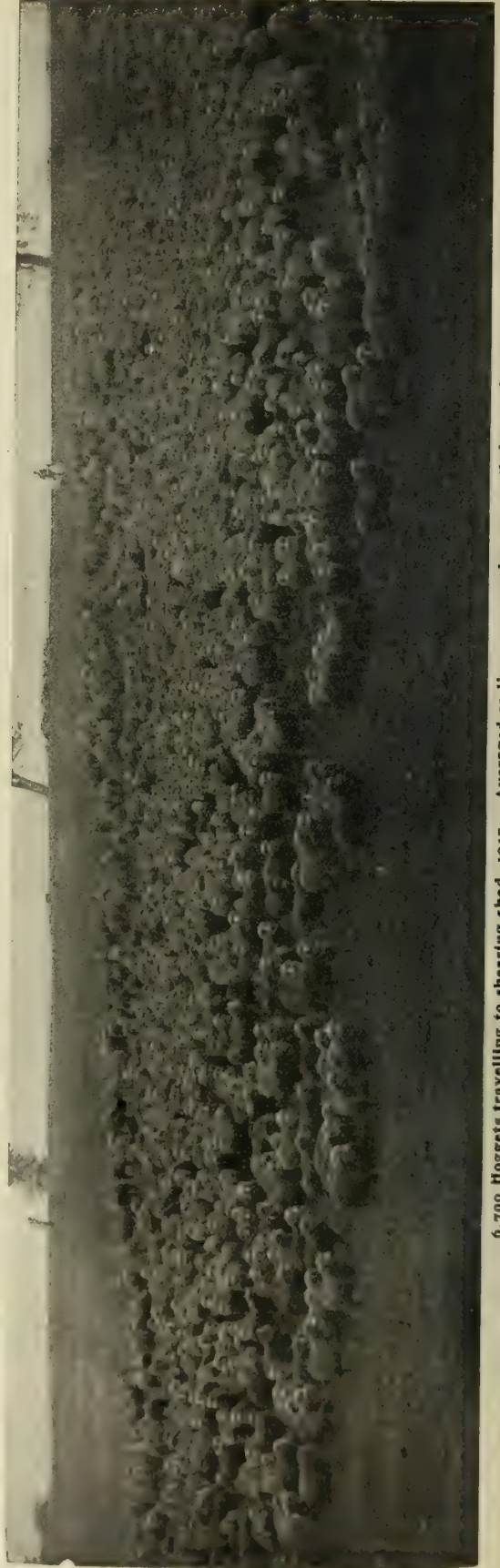


1½ Year-Old Ewes

Cut 22½, 21, 20, 18½ lbs. of Wool, 1917.

Bred by and the property of G. R. and A. Melrose, "Rosebank," Mt. Pleasant.

Rosebank secured Champion for Ewe at the Adelaide Royal Show three years in succession, 1910 to 1912. Awarded to different sheep by three different judges. Also secured the whole of the First Prizes offered by the Society for Ewes in 1912.



6,700 Hoggets travelling to shearing shed, 1917. Averaged 11 lbs. 5 ozs. under 12 months' growth.

G. R. & A. MELROSE, "Rosebank," Mount Pleasant & August

THE KOONOONA STUD

Large framed,
bold woolled,
grass fed, pure
Australian
Merinos.
Founded in
1863.
Quotations
given for stud,
selected and
flock rams

Apply :—
Koonoona
Proprietors,
Cowra
Chambers,
Adelaide;
or
W. G. HAWKES
Manager,
Koonoona,
Burra, S. A.



Special Stud Ram, "LORD KITCHENER," 3½ Years Old, by "Rajah." Cut 33 lbs. Wool.

THE KOONOONA STUD.
Burra, South Australia.

EAST BUNGAREE MERINOS

South Australia.



2-year-old Stud Ram 250.

Grazed on natural grasses only.

PURE bred by E. W. Hawker since 1906 from his share of the original Bungaree Stud and Flock, the oldest combing Merino flock in South Australia.

The **EAST BUNGAREE** sheep are large framed, plain bodied, with splendid constitutions, and are well covered with long robust wool showing plenty of character.

In October 1909 the **EAST BUNGAREE** wool topped the Adelaide market, and has consistently brought high prices ever since.

In 1917, 18 bales of **A A E** were appraised at 25½d. ; nine bales of **B B E** at 24½d. ; 14 bales of **A H A E** at 23½d.

For particulars of Stud and Flock Rams and Ewes for sale apply to—

EDWARD W. HAWKER, East Bungaree, Clare, South Australia

Or to the Manager.

Telegrams—East Bungaree, Clare S.A.

Telephone—East Bungaree, Clare, S.A.

Burrawang Merinos

Estate of the Late C. Hedley Edols.

The Stud is classed by Mr. W. O'Brien, of Mumblebone.



¶ Since 1880 the Burrawang Flock has been maintained solely from Wanganella blood. In that year six very high-class rams were purchased from Austin and Millar. One of these, "Old Bestwool," laid the foundation, and created the present high reputation of the flock. At the same time 700 2-tooth rams were purchased from the same source, nearly all of "Premier" and "Warrior" strains, considered two of the best rams on Wanganella. In 1887 two more high-class stud rams were purchased from Wanganella; since then no other purchases have been made until 1918, when a high-class Murgha ram was purchased at a cost of 1000 guineas. Although the country has altered the type somewhat, the sheep are as strong in constitution as the Wanganellas in their home in Riverina.

¶ The Burrawang wool retains its excellent name with buyers, and is always in demand at a satisfactory range of prices.

¶ The grown sheep, comprised chiefly of breeding ewes (no wethers), averaged 12 lbs. 8 ozs. of wool 1916 clip.

For Stud or Flock Rams apply to—

The Manager, Burrawang, Yarrabandai, N.S.W.

or to

The Executors of the Late C. H. EDOLS,

c/o Perpetual Trustee Company (Limited), 33-39 HUNTER STREET, SYDNEY

H. E. KATER & SON'S EGELABRA STUD, WARREN N.S.W.



EGELABRA TWO-TOOTH STUD RAM.

The Egelabra Stud is a portion of the Mumblebone Stud, and was acquired by the present owners by the subdivision of Mumblebone in 1906. The stud was founded in 1879 by H. E. and E. H. Kater, who purchased rams and ewes from the late Hon. John Smith, of Gamboola, Molong. Since that date no fresh blood has been introduced into the flock. Mr. Smith was a noted breeder. His flock was founded about 1840 from Marsden's flock of Spanish Merinos and Negrettis, specially imported from Spain. Thus it is claimed that the Egelabra Stud has maintained for 78 years that purity of blood which is so important.

The sheep are noted for large frames, plain bodies, splendid fleeces, long staple, and magnificent constitutions. At a recent shearing the Egelabra sheep, consisting mainly of breeding ewes, cut 14 lbs. 4 ozs. of wool.

For particulars of Sale Rams apply to—

The Manager, Egelabra, Sandy Creek, Warren, N.S.W.

MUMBLEBONE STUD

Bred on Western
(N.S.W.) Salt
Bush Country.
Noted for their
robust constitution,
large frames, and
splendid fleeces of
long, strong staple.



Established
1879.

Special Stud Ram No. 319.

For particulars sale rams apply—

KATER BROTHERS, Mumblebone, Warren, N.S.W.

The WANGANELLA STUD



SPECIAL STUD RAM 17.2

Sold by Auction at the Sydney Sales, July, 1920, to Mr. Maurice Collins, of Mallett, S.A., for 700 gns. thereby obtaining the highest price at auction during the sales for two successive years by the Wanganella rams.

STUD & FLOCK RAMS FOR SALE.

For particulars apply

The Manager **AUSTIN WANGANELLA CO. LTD.**, Wanganella, Deniliquin, N.S.W.

DALKEITH MERINOS

PLAIN BODIED

PURELY GRASS-FED

BOONKE BLOOD



SIR ALICK

STUD AND FLOCK RAMS FOR SALE.

Trucking Stations—Mudgee, Merriwa, or Craboon. Rams will be delivered on trucks to suit buyer's convenience.

F. D. McMASTER, DALKEITH, CASSILIS, N.S.W.

The stud is under the personal supervision of Mr. F. D. McMaster, and was classed by the late Mr. J. C. Darke. The work in the future will be done by Mr. W. J. McCarthy.

Sir Alick, a son of Australia Day, took first prize for ram under 2 years at the Sydney Show, 1919. In 1920 he took Reserve Grand Champion and first prize and was sold to the Wellbondongah Pastoral Company for 400 guineas.

Amongst the sires used are Australia Day, Comedy King, General Grant, Young Comedy King, Young Australia, and numerous other high-class Boonoke Stud Rams. Additions made to the stud in 1918 were as follows:—10 Boonoke blood special stud ewes at 110 guineas, which took second prize Sydney Show, 1918, and 1 ditto Grand Champion at same Show at 150 guineas, all purchased from Goldsbrough, Mort & Co. Ltd., Canonbar Station; 10 special stud pure Boonoke ewes at 100 guineas each, from F. S. Falkner & Sons Ltd.

Deniliquin Stud Park North Stud

(PURE WANGANELLA BLOOD.)

The Property of THOMAS MILLEAR.



"DONALD DINNIE"

Bred and Sold by THOMAS MILLEAR, Deniliquin Stud Park Stud, N.S.W., through Messrs. Herbert Power and Son, to the proprietors of the CANOWIE ESTATE, South Australia. Price, 1200 Guineas.

The above photo was taken at Canowie in 1908.

Since 1906 "Donald Dinnie" has sired 1056 lambs, and an immense sum has been received by the owners for his surplus progeny. His fleece has averaged 32 lbs. for the past 10 years, and now (1915), at 12 years old, he has cut 31½ lbs. of bright, lustrous wool.

Among the rams sold have been—"Donald Dinnie" (photo above), in 1906, for 1200 gns.; "Sir William," in 1909, for 1350 gns.; "Stud Park No. 10," in 1918, for 2500 gns., this latter being a world's record for a 6-year-old pure Peppin Rambouillet.

This Stud was formed in 1892 by the father of the present owner (then managing partner in Wanganella), and the classing since 1898 has been done by the owner in conjunction with his Manager, who is now in his 24th year of service.

In June, 1919, Mr. Millear transferred his Deniliquin Stud Park property, with about 4000 stud sheep, being absolutely fair samples in each grade of the 20,000 owned by him, to his son, Thomas Millear, Jun., retaining for himself the property Stud Park North, Jerilderie, N.S.W., which has been worked for many years past in conjunction with Stud Park, Deniliquin. During his son's absence from Australia Mr. Millear will carry on this latter property in the former's interests.

N.B.—The sale of Wanganella Estate by the Exors. of late Thomas Millear (of which Mr. Millear was a Trustee) does not affect the Stud Park North business, as no sheep from Stud Park North were parted with, nor did Mr. Millear acquire any from Wanganella Estate for Stud Park North, excepting prior to the sale of the Estate.

INQUIRIES FOR STOCK SHOULD BE ADDRESSED TO

THOMAS MILLEAR, Edgarley, Willaura, Victoria,

or to the MANAGER, STUD PARK NORTH, JERILDERIE, N.S.W.

VICTORIA DOWNS STUD

MORVEN

QUEENSLAND



*A Queensland Stud of
pure Peppin Wanganella blood*



BRED on the downs of Western Queensland, the **VICTORIA DOWNS SHEEP** are noted for their exceptional constitutions and grow a fleece of very dense medium combing wool, of good length and abundant character.

RAMS—Plain bodied, large frames, masculine, bold carriage.

EWES—Plain bodied, large frames, deep, roomy, good breeders.



CATTLE—best blood available—both sires and dams, chiefly Derrimuts, together with a number of imported females—41 pedigree females costing from 100 to 515 gns., averaging 188 gns., and 34 other pedigree cows and heifers, averaging 60 gns. The bull Clifton Cherry Colonel, purchased from A. J. Simpson for 1000 gns., is used in the Victoria Downs Stud. All Cattle Herd Book registered.

Stud and Flock Rams for Sale.

Flock, 4, 6 and 8 gns. Selected, 10 and 12 gns. Stud, from 15 gns. upwards.

Stud and Herd Bulls for Sale.

Young herd bulls from 20 gns. upwards. Young pedigree bulls from 40 gns. upwards.

For full particulars apply to—

LORD BROS., Victoria Downs, Morven, Q'land.

THE BUNDEMAR STUD

Inquiries
for
Stud
and
Flock
Rams
to
The Manager
BUNDEMAR
TRANGIE,
N.S.W.



**BONNIE
CHARLIE**
Sire:
Prince
Charlie
Grand Sire
Lord Charles
G.B. Sire:
Sir Charles

BONNIE CHARLIE.

Bred by Estate late F. E. Body, Bundemar, Trangie, N.S.W. Born Nov. 1st, 1918.
Sold June 16th, 1920, to Messrs. Vermaak Bros., Stockdale, Stormberg Junction, C.P., South Africa, for Three Thousand Six Hundred Guineas.

Also bred in the Bundemar Stud	Prince Charlie	...	...	Sold to M. Collins for 3000 guineas in 1918
	Lord Charles	...	...	H. Collins & Co. for 2000 guineas in 1915
	Sir Charles	...	...	D. & W. Gibb for £1000 in 1910
	2-tooth Ewe, No. C 692	...	...	C. Meyer, Edenburgh, S. Af., for £250 in 1920

HADDON RIG MERINO STUD

Pure Wanganella Rambouillet



Haddon Rig 2-Year-old Ram, "Royal Dandie," sold to A. G. Michaelan for South Africa for 1500 guineas.

A few rams of "record" quality at "reasonable" prices available each year.

FRANC B. S. FALKINER, Owner, Late Managing Director of F. S. Falkiner & Sons Ltd., 30 years Riverina experience in breeding and active station management.

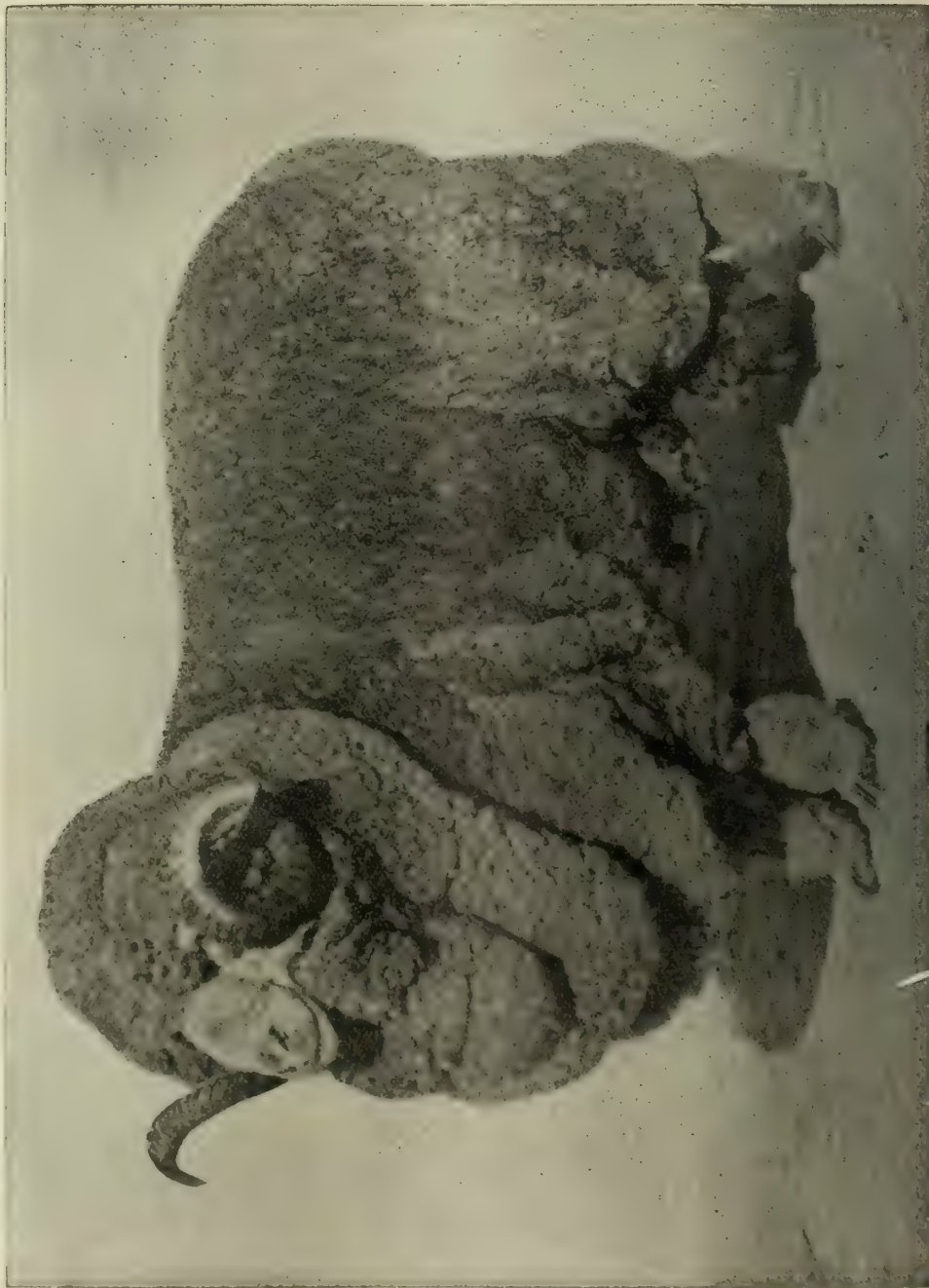
Inquiries to **HADDON RIG, WARREN, NEW SOUTH WALES.**

THE WILLANDRA STUD

Property of The Willandra Pastoral Co. Ltd.
Pure Wanganella Blood.

The Willandra sheep are bred in a 14" rainfall and are entirely grass fed, possessing strong constitutions, plain bodies, with good heads and necks (which is a distinct advantage where the fly is troublesome), and long

dense fleeces of robust wool. The Willandra sheep produce a fine type of wethers, with exceptionally large frames, plain bodies, well proportioned, and most suitable carcasses for export, while at shearing yield heavy fleeces of attractive wool.



WILLANDRA STUD RAM.

Stud Rams cut up to 35 lbs. Stud Ewes cut up to 25 lbs. Flock and Stud Rams for Sale.

For particulars apply to—The Manager, Willandra Station, Booligal.

Telegrams: Hillston. Cable Address: Acumen Sydney. A.B.C. Code, 5th Edition.

The UARDRY Stud.

PURE PEPPIN BLOOD.



Group of Seven Rams sold at Auction, Sydney, July 1918, Averaged £319 10/-

Stud and Flock Rams for Sale.

Enquiries should be addressed to:—

Charles Mills (Uardry) Limited, UARDRY, Hay, N.S.W.

Telegrams to "MILLS, Uardry, Carrathool."

WANGANELLA ESTATE STUD

Property of F. S. FALKINER & SONS Ltd.



No. 955.—OPTIMIST. 3 years old.

Sold to Dr. G. E. Goddard for 1750 guineas.

Property of F. S. Falkiner & Sons Ltd., Wanganella Estate, Conargo, N.S.W.

Large frames, plain bodies, robust wool of pronounced character, good length and colour. Numerous letters of appreciation from buyers throughout the Commonwealth and South Africa.

THIS STUD was formed by Messrs. Peppin & Sons in 1861, and purchased with the Station by Messrs. Austin & Millear in 1878. This partnership terminated in 1894—Mr. Millear then taking over his half of the property and stock, which he named **Wanganella Estate**, and conducted till his death in 1895. The Trustees carried on the business until August, 1910, when they sold the property, the whole of the pure bred **WANGANELLA ESTATE Stud Flock**, and the **GOODWILL** of the business to **F. S. FALKINER & SONS LTD.**

FLOCK and STUD RAMS for SALE, for particulars apply—

F.S. FALKINER & SONS LTD., Wanganella Estate, CONARGO, N.S.W.

BURNIMA MERINO FLOCK

A combination of the famous Murray and Koonoona blood of South Australia. Large-framed, plain-bodied sheep, cutting heavy fleeces of high-class wool. Pure Australian Merinos bred on sound lines. These sheep have given satisfaction wherever used.



4-tooth Stud Rams.—Two of the Leading Sires.

STUD AND FLOCK RAMS FOR SALE.

Apply to the **MANAGER, BURNIMA, BIBBENLUKE, NEW SOUTH WALES.**

Zara Merino Stud



Zara Stud Ram

**Stud
and
Flock
Rams
for
Sale**



Group of Zara Stud Rams

**Estate late
WILLIAM OFFICER—ZARA—WANGANELLA
New South Wales**

Boonoke Stud Merino Sheep.

PURE PEPPIN BLOOD.



A leading Boonoke Sire. Photo taken at 6 years old.

Bred by F. S. FALKINER & SONS LTD., Boonoke, Conargo, N.S.W.

Inquiries for Stock should be addressed to—

F. S. FALKINER & SONS Ltd., Boonoke, Conargo, N.S.W.
or Boonoke North, Widgieva Siding, N.S.W.

Wangamong

(Rambouillet—Wanganella since 1863)

Stud.

FLOCK RAMS.

Sales for year 1913, including below—1258, to 28 old buyers out of 36—to all parts of Commonwealth. South Africa (7 old buyers out of 9). New Zealand, only one buyer inspected, and he took 200. 1916-17-18, 49 buyers out of 83 were old ram buyers, all but 3 left selection to breeder.

1916 RECORD.

WOOL RETURNS.

40 Years' Averages, All Sheep, 90% Ewes.

1879	All Wool in Grease	...	10½d.	5/9 per Sheep	Australian Markets Always.
1889	"	"	10½d.	7/3	
1899	"	"	11½d.	8/9	
1909	"	"	10¾d.	9/5	

1914	All Wool in Grease	...	11.62d.	10/5 per sheep
1916	"	"	21½d.	17/9
1917	"	"	19.34d.	16/4

Sale Rams—Earmark, Oblong Punch-hole near ear.

Wool and Mutton. The same to-day—proportionately better—as 40 years ago.

VIGOR.

4000 Wangamong Stud-bred Ewes, 3 to 13 years old, marked 85% very fine lambs. 1918, ditto 98%. "Wollindina," pure Wangamong breeding many years, marked 96% lambs.

The "Fly Trouble" does not affect Wangamong Sheep or Wangamong blood largely infused.



HARDINESS.

1914—Driest Year on Record—6 inches Rainfall.

All Wangamong Sheep averaged 12½ lbs. Wool.

AUSTRALIAN RECORD, Nov. 14, 1916.

WANGAMONG

over S (with arrow through) in diamond.

Sold by N.Z.L. & M.A. Co., Melbourne.

28½d. (in grease) 50 bales.

All Fleece averaged 28.03d. Record to November 14

All Broken, 1st & 2nd Pieces, 25d. Record to date

All Bellies, 19½d. Locks, 8d.

All Wool, 20/- per Sheep.

94% BREEDING EWES.

Type Specially Selected Flocks—£6 6s. to £10 10s.—2 years old. Representing 451 sold and delivered during 1913 to 18 old buyers out of 24.

BIG, PLAIN-BODIED, HARDY, LONG-STAPLED, ROBUST TYPE OF 60 YEARS' STANDING.

Exactly between Wanganella and South Australian Types.

Apply { W. B. Sanger, Director, or } **WANGAMONG PASTORAL CO., Daysdale, N.S.W.**
J. M. Sanger, Manager

"LAMARA" STUD MERINOS



STUD RAM No. 28 (2½ years.) Sire, "Lord Charles."

BREEDING.

This Stud is a portion of the "Collinsville" Stud Flock, which has recently been subdivided.



"SILVER CHARLES."
Sire "Lord Charles" (cost 2000 guineas.)

For further particulars apply to—

H. MELVIN COLLINS

"Lamara," Booborowie, Burra, Sth. Aust.

Wires: "Lamara," Booborowie, S.A.

Telephone: No. 2, Booborowie.

THE

South Wangamong Stud Merino Flock

Property of CHAS. D. SANGER



4-tooth Selected Flock Sale Rams.

Stud Flock founded in 1853. In 1863 ten Wanganella Stud Rams (the pick of their celebrated imported pure Rambouillet sire, Emperor's Get) were successfully introduced. Since then no other strain has been introduced into the Stud.

Average of all grown sheep (75 per cent. lambing ewes), 12 lbs. 13 ozs.

The 1915 Clip sold in Melbourne to 18½d., and Pieces to 15½d. in grease.

" 1916	"	"	22½d.,	"	"	19½d.	"	"
" 1917	"	"	25½d.,	"	"	21½d.	"	"

For particulars of Flock and Stud Rams apply to—

CHAS. D. SANGER, South Wangamong, Corowa, New South Wales.

THE GUMS MERINOS

Large Frames—Strong Constitutions—Long Staple—Bold Fleeces



Special Stud Ram, 2½ Years Old.



Three 1½ Years Old Stud Ewes. Cut 18, 19 and 20 lbs. Wool respectively.

Founded on Murray, Koonoona and Canowie blood, the Stud is true to the pure South Australian type. Bred on saltbush country and without any pampering the sheep will stand up to the hardest conditions.

The Property of
THOMAS H. PEARSE & SONS,
The Gums—Florietown—S. Aust.

Phone—58 Kooringa

Apply—The Manager, The Gums.

The Springfield Pure Merino Stud

Goulburn

New South Wales.

Founded in 1838 by the late W. P. FAITHFULL.
Bred since 1871 by A. LUCIAN FAITHFULL.



ADMIRAL.

Bred by A. Lucian Faithfull. Weight of fleece,
29 lbs. 4 ozs. 12 months 3 days growth.
Length of Staple, 4½ inches.

For further particulars apply to—

A. LUCIAN FAITHFULL,
Springfield, GOULBURN, N.S.W.

TELEGRAPH AND TELEPHONE ON.

These sheep are noted for their very high cutting value per fleece. Also for their hardy, strong constitutions, doing well in any climate, and growing to a great size.

The A. A. D. Pomeroy wool, bred by A. A. Dalglish from Springfield bred rams and out of ewes by Springfield bred rams for the last **ten** years, **topped** the Sydney market for greasy wool. In 1917, **40** bales realised **29d.** and **44** bales, **29½d.**

This year (1918) same A. A. D. Pomeroy wool has realised **30d.** per lb.

This year (1919) wool the progeny of Springfield bred ram again **topped** Sydney market, viz. **Lerida 30½d.**



30 Special Stud Ewes, bred by A. Lucian Faithfull.
Typical style of Springfield Merinos.

Average weight of Fleeces, 12 months' growth, unhoused, 18 lbs. 4½ (20)

COBRAN

PURE PEPPIN BLOOD.

DENILIQVIN, NEW SOUTH WALES



COBRAN 4-tooth Ram. Length of staple, 5 inches.

For full particulars apply

**C. H. BESLEY, The Olderfleet, Melbourne, Vic., or
The Manager, COBRAN, Deniliquin, N.S.W.**

The "COBRAN" wool is noted for its robustness, great length of staple, excellence of character and high yield; the sheep are big framed, plain bodied, heavy cutters, very even in type, and have been bred on these lines since its inception.

Goolgumbla Stud Merinos

The property of
Mr. GEORGE STUART.

**Pure Peppin strain,
large frames,
strong constitution,
long staple.**

All the ewes in the Goolgumbla Stud are by pure Wanganella, Haddon Rig, and Boonoke rams from ewes of the same blood.

For particulars apply—

**The Manager
GOOLGUMBLA,
Jerilderie,
N.S.W.**



Goolgumbla Stud Ram.

MERRIBEE STUD FLOCK (Late Bull Plain)

MAINLY MURRAY Blood.

Established 24 Years.

Extra Large Frames.

**Heavy Fleeces of long,
strong, combing Wool.**

All MERRIBEE grown sheep
averaged 13 lbs. 3 ozs. wool
with barely 12 months' growth
—Lambs averaging $5\frac{1}{2}$ months
old cut 5 lbs. 2 ozs.

ORDERS BOOKED FOR RAMS.

Particulars on Application.

W. W. KILLEN
Merribee, Barellan, N.S.W.

Telegrams—
iBarellan (thence Telephone).



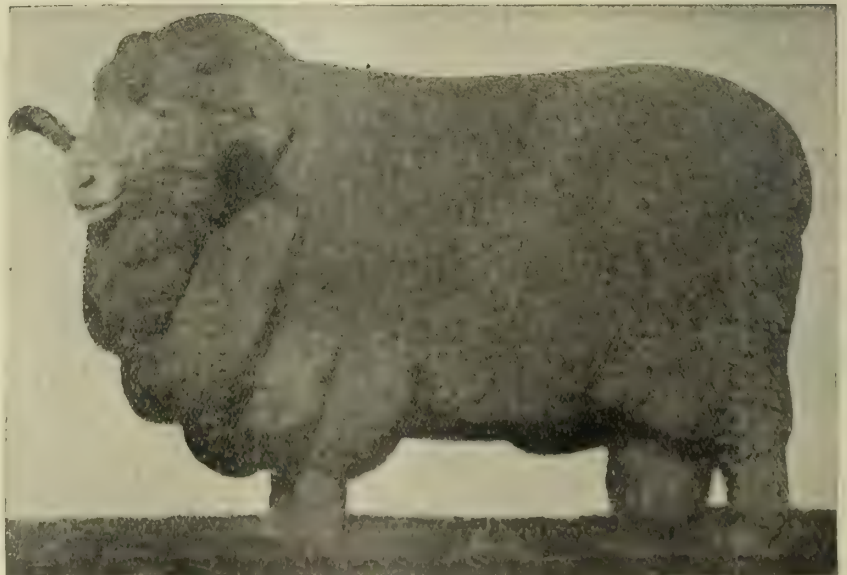
WIRRA WIRRA STUD MERINOS

At MT. CRAWFORD, SOUTH AUSTRALIA.



Grazed at large on natural
grasses only.

Bred by and the Property
of MURRAY DAWSON,
Wirra Wirra, S.A.



WIRRA WIRRA, $\frac{1}{2}$ years old Stud Ram, No. 300.

MURRAY DAWSON, WIRRA WIRRA, Mt. CRAWFORD,
SOUTH AUSTRALIA.

BARRATTA MERINO STUD

Pure Peppin Blood.

Property of
AUSTRALIAN, MERCANTILE, LAND and
FINANCE CO. LTD.

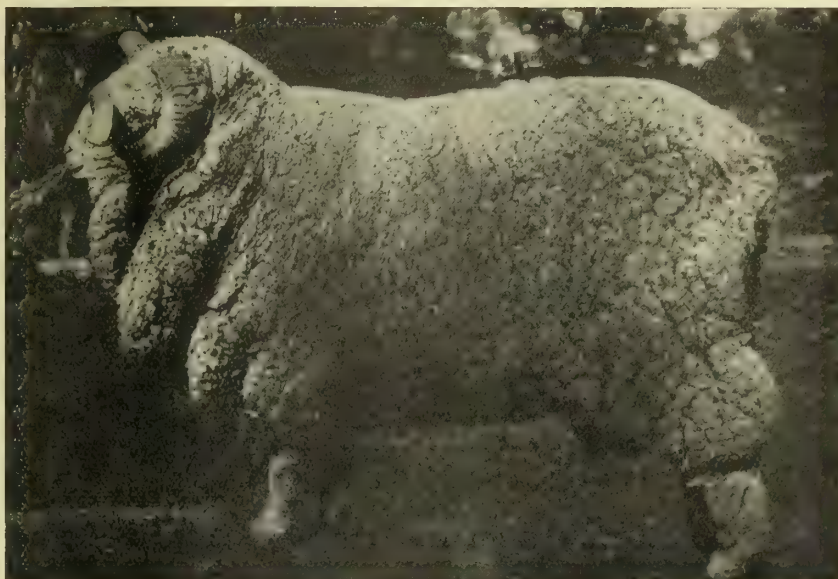
This Stud was commenced by the Company in the year 1893, on another property, by the purchase of high-class stud ewes and rams from Messrs. Austin & Millear, Wanganella, and since then, from time to time, purchases have been made from Wanganella, Wanganella Estate, Stud Park Deniliquin, Murgha, and Haddon Rig.

STUD and FLOCK RAMS FOR SALE.

For particulars apply:—The Manager,
BARRATTA, DENILQUIN

or to

AUSTRALIAN, MERCANTILE, LAND & FINANCE CO. LTD.
Sydney—Melbourne—Brisbane



BARRATTA BRED RAM.—Grand Champion Australian Sheepbreeders' Show, 1917.

Photo by Amateur.

CASSILIS MERINO STUD

The Property of A. BUSBY.



The sheep are large-framed, plain-bodied and carry fleeces of high quality, density and character.

These rams have been very successful in Central Queensland.

The flock has been classed for many years by the late J. C. Darke, and is now being classed by W. J. McCarthy.



Particulars on application from:—

THE MANAGER, CASSILIS STATION, CASSILIS, N.S.W.
or DALGETY & CO. LTD., SYDNEY.

Brucedale & Curranyalpa Merino Stud Flocks

Brucedale Stud, established 1850. Now consists of Peppin blood ewes bred at Curranyalpa, rams in use from Bundemar, Uardry, Boonoke, and Urangeline.

For particulars apply to—

H. C. SUTTOR,
Brucedale, Peel,
New South Wales.



Special Stud Ram "DANDY," 4 years old.

Bred at Curranyalpa. Cut 31 lbs. wool hand shorn, September, 1920, 12 months' growth.

Curranyalpa Stud. Peppin blood from Boonoke, Bundemar, and Wanganella bred rams and ewes. Rams now in use from Lucernedale, Haddon Rig, and Uardry. Big, strong, hardy, plain body sheep, bred on the dry salt bush plains of the Darling for years.

For particulars apply to

CLAUD H. SUTTOR,
"Mia Mia,"
Purlewaugh, via
Coonabarabran.

Mendip Hills Merinos and Halfbreeds

FLOCK ESTABLISHED 50 YEARS.

The Mendip Merinos gained Champion Ram and Ewe at Christchurch Show in 1903-4-5-6, and again in 1915 and 1916. Mendip Halfbreeds have won the "Liston" Cup Competition for Corriedales and Halfbreeds, competing together three times since its inception in 1911.

**Stud
Rams
cut
up to
34 lbs.
Wool.**



**Stud
Ewes
cut
up to
23 lbs.
Wool.**

Part of a Mob of Stud Rams Exported to Argentina at an average of 70 gns.

For particulars apply—

NORMAN RUTHERFORD, Mendip Hills, or G. L. RUTHERFORD, "Connemara," Parnassus, N.Z.

WARRAH MERINOS

The Property of
The A.A. Co.

The Warrah Sheep are plain bodied, large framed and carry heavy fleeces.

For particulars apply THE MANAGER, WARRAH STATION, Willow Tree, N.S.W.

THE GUNDARY PLAINS MERINO STUD



STUD RAM JUPITER.

The Gundry Plains Stud Ewes were originally purchased from the stud flocks of Messrs. Litchfield, Cooma, and A. Lucian Faithfull of Goulburn. Stud Rams were purchased from the above flocks, and from Boonoke, to mate with the above ewes. The aim of the flock has been to produce a robust, plain-bodied, strong-wool sheep, and they are noted for their heavy fleeces of strong combing wool.

For further particulars apply to—

A. R. MAPLE-BROWN,
Gundry Plains, Goulburn, N.S.W.

MULWALA MERINO STUD

Founded 1863.



Type of selected sale rams bred at Mulwala.

The flock has always been bred on the same lines, under management of James Sloane since 1877.

JAMES SLOANE & SON,
Mulwala Station, Mulwala; or Wood Park, Jerilderie, N.S.W.

WYAMBEH CORRIEDALE STUD

The property of

John A. Sloane, Wyambeh, Mulwala, N.S.W., and
John A. Sloane & Co. Ltd., Neyliona, Carrathool, N.S.W.

Flock Founded 1882 by H. J. Corbett.
Lincoln Merino Blood only. When exhibited have always proved successful, winning Champion Prizes 1918, 1919, 1920 at the Australian Sheepbreeders' Association Show. Registered Australian Corriedale Sheepbreeders' Association.

Particulars of Rams for Sale apply—

JOHN A. SLOANE, Wyambeh, Mulwala, N.S.W.



WYAMBEH Two-year-old Stud Ram.

The Eurella and Wairoa Corriedales



The flocks are direct descendants from 800 ewes purchased during 1904-5, and a subsequent purchase from the N.Z. and A. Land Co.'s Corriedales (No. 1 N.Z. Flock Book), established in 1874 and thus the oldest in existence.

Origin Lincoln-Merino and no other blood ever introduced.

All rams used in these flocks have been from the parent flock or bred by owners.

Registered in Australian Corriedale Sheep Breeders' Association
Flocks Nos. 15 & 16.

Following previous successes, at the 1919 Sydney Sheep Show these flocks practically "swept the pool," taking all First, Reserve and Champion Prizes.

Stud and Flock Rams For Sale. Guaranteed to breed true to type.

For particulars apply to— **D. MACFARLANE, Eurella Estate, Rylstone, N.S.W., or to MACFARLANE BROS., Wairoa Estate, Narrabri, N.S.W.**

NALPA STUD MERINOS

E. C. & J. L. STIRLING, South Australia.

The flock is one of the oldest established in the State, and a noted prizetaker in both **SHEEP and WOOL.**

NALPA secured all champion prizes for Merino wool as allotted Royal Show, Adelaide, 1914 to 1918. Also first and special prizes for two best rams' fleece, Melbourne Royal, 1919.

STUD AND FLOCK RAMS FOR SALE.

Apply to **Manager, Nalpa Langhorne's Creek, South Australia**

Telegrams: Fullarton, Wellington, E.



No. 4-1—Double Reserved Champion, Australian Sheep Breeders' Association, Melbourne, 1917. Sold to Geo. Heiberhagen, South Africa, for 1000 guineas. Cut fleece 34 lbs.

The N.Z. & A.L. Co.'s Corriedales

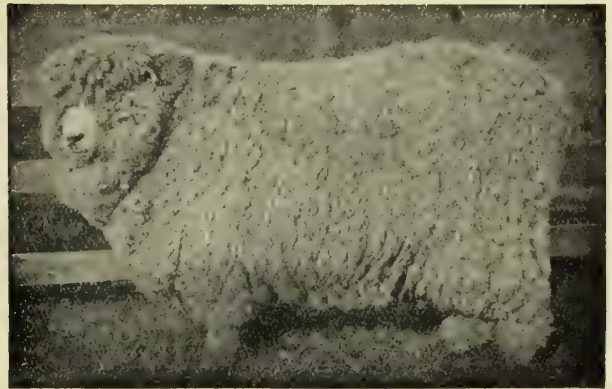


4-tooth Ram.

Champion and winner of two Specials, Christchurch Show, 1915.

The Company's flocks are No. 1 and No. 2 in the New Zealand Flock Book, and are the oldest in existence. Show-yard successes during the past 10 years have been very numerous, and include in that time 10 Championships at Christchurch, the premier show for the breed in New Zealand.

The New Zealand and Australian Land Company's New Zealand Corriedale Flock originated at the Levels Estate in Canterbury in 1874, when Mr. W. S. Davidson, the present General Manager, put 1000 specially selected Merino Ewes to Lincoln Rams, and their progeny, kept absolutely pure, now number over 6000 Ewes. The Flock was kept at The Levels until that property was resumed by Government in 1904, when part of the Corriedales was sent to Hakatarama, in Canterbury, and the remainder to Moeraki, in Otago, since which the purity has been strictly maintained.



4-tooth Ram.

Champion and winner Silver Shield, Christchurch Show, 1917.

STUD and FLOCK RAMS FOR SALE.

APPLY TO THE

New Zealand and Australian Land Co. Ltd., DUNEDIN.

The Rakahuri Corriedale Flock



Champion Corriedale Ram, Rangiora, 1915.

Bred by Hugh Ensor.

One of the best quality and heaviest woolled flocks in New Zealand.

Established the record price of **19½d.** for Corriedale Greasy Fleece Wool at the Christchurch sales, Nov. 11th, 1915.

For shape and constitution the Rakahuri sheep cannot be surpassed. Winners of many prizes. Flock established 1889. Registered N.Z. Flock Book.

STUD and FLOCK RAMS FOR SALE.

For full particulars apply to—

DALGETY & CO. LTD.

or HUGH ENSOR, Rakahuri, Rangiora, Canterbury, New Zealand.

"The two most profitable general utility breeds."

Corriedale Sheep

for constitution, carcase, big lambings and bulky fleeces of even type and high value.

The Corriedale Park Stud, Wagga Wagga, New South Wales (Australian Corriedale Breeders' Association Flock No. 1), founded in 1882 by mating Stud Merino rams and Stud Lincoln ewes, inbred ever since, an outcross obtained by the introduction of the very highest grade of Stud rams, mainly from the N.Z. and Australian Land Company's

Moeraki Stud, New Zealand (founded in 1874).

During the past five years sheep from the Corriedale Park Stud have taken over 100 first and 20 Champion Prizes at Australian Sheepbreeders' (Victoria), N.S.W. Sheepbreeders' (Sydney), Melbourne Royal, Wagga Wagga, Albury, and Hamilton Shows.

RAMS cut from 15 to 25 lbs. wool. EWES cut from 10 to 15 lbs. wool. Pen Pure Corriedale Wethers sold in Melbourne Sale Yards at £5 per head. Wool grown in Riverina appraised Geelong, 1917, at 23½d. per lb.

NOTE.—Inspection of original letters from purchasers from all over Australia invited.

It pays to have the best.



Corriedale Rams, Ewes, Lambs, and Wethers.

Bred by, and the property of, J. F. GUTHRIE, Corriedale Park, Wagga Wagga, N.S.W.

500 Pure Rams [(Poleys)] of 1919 [drop], for delivery at from 5 guineas upwards.

Red Polled Cattle



FLIGHT COMMANDER, 21 months, by Belligerent (imp.) ex Birdseye.

The most prepotent breed—splendid milkers, ready fatteners to heavy weights.

The Stud at Corriedale Park was secured from Mr. Ben Osborne, of Redbank, Harden, New South Wales—all imported or descended from high-class imported cattle.

The young stock are by **RENDLESHAM ELECTOR** (imp.)

Sire now in use **FLIGHT COMMANDER** by **BELLIGERENT** (imp.)—Dam, the famous cow, **BIRDSEYE**.

Pedigreed bulls for sale at from 40 guineas upwards.

APPLY J. F. GUTHRIE, Geelong, Vic., OR ANY AUSTRALIAN STOCK AGENTS.

THE WHITE ROCK CORRIEDALE STUD FLOCK

THE NEW BREED OF THE NEW CENTURY.

Wool clip equal in value to the best Merino flocks.

Mutton and Lamb the finest quality grown in Canterbury.

Robust constitutions and an up-to-date sheep.

Weight of fleece up to 28 lbs.

Corriedale wool highest price in New Zealand markets.



Corriedale Stud No. 1-18, sold in Sydney July 1920.

Grand Champion Sydney, 1920.

A GREAT COMBINATION OF WOOL AND MUTTON.

Champions International Show, 1906.

Champions, Rams and Ewes, Canterbury Metropolitan Show, 1910.
Champions at Launceston and Hobart Shows, 1910-1911, bred from this flock.

Grand Champion, Sydney, 1920.

Stud Rams and Ewes delivered at any port in the world.

Recent Exportations have been made to all the States in Australia,
South Africa, America, British East Africa, all parts of New Zealand, and other places.

Flock Established 1889. Registered N.Z. Flock Book.



Two Corriedale Stud Rams sold in Sydney July 1920.

VARIOUS SHOW RECORDS INCLUDE—

PANAMA EXHIBITION, U.S.A. — Champion and Reserve Champion Rams, Champion Ewe. Also other prizes. Gold and silver medals for wool (fleeces).

SYDNEY SHEEP SHOW, N.S.W. — Grand Champion Rams and Ewes 1915. Many other prizes.

BRISBANE EXHIBITION, Queensland. — Champion Rams and Ewes 1915. All other prizes.

NEW ZEALAND SHOWS. — Champion Ram Ashburton Show, also Stringfellow Memorial Cup. Champion Ram Nelson Show. Champion Ewe Rangiora Show. Many prizes Christchurch Show, including the Corriedale Cup for most valuable combination of wool and mutton, single ram, also the Quibell Cup for best average value three rams. Half-breds competed for this also. Different teams of sheep competed at each of these Shows. Practically all were sold 1915. Reserve Champion and other prizes, Christchurch, 1919.

PROGRESS.

The greatest invention in modern Sheep Farming is the Freezing Industry. The Freezer opens to the Sheep Farmer the Meat Market of the whole world. Before only Wool could reach the World's Markets. **PROGRESS.**

To-day it is most profitable to grow sheep which combine the wool value of the Merino and the meat value of the British Breeds.

THE CORRIEDALE REPRESENTS PROGRESS.

FLOCK AND STUD RAMS FOR SALE.

For Particulars apply to

C. H. ENSOR, White Rock, Rangiora, N.Z.

OR TO YOUR AGENTS.

Note the bold appearance,
denoting constitution.



Note the evenness of type
these sheep show.



BUSHEY PARK CORRIEDALES

(Registered).

Foundation: Lincoln—Merino.

This flock was founded by the purchase of over 1000 specially selected studs at the dispersal of Mr. Leonard White's famous flock (No. 9, N.Z.F.B.)

CONSTITUTION.

Note the shape of these sheep. They have robust constitution and large symmetrical frames, as well as heavy fleeces.

WOOL.

The wool is a dense, shafty, true halfbred, and is noted for its excellence of character and length of staple.



PREPOTENCY.

Having been carefully line-bred for many generations, the whole flock shows a strong family likeness and fixity of type. The rams are consequently extremely prepotent, having the power of impressing their characteristics on their progeny.

SHOW YARD RECORD.

The Canterbury Agricultural and Pastoral Show, held annually in Christchurch, is the "Mecca" for Corriedale sheep in New Zealand. For many years Mr. White's sheep have been great prize takers. His latest achievement was the winning of the Championship Gold Medal for Ram, and the Corriedale Cup for most points in rams in 1919.



STUD & FLOCK RAMS FOR SALE.

For particulars apply to

WRIGHT, STEPHENSON & CO. LTD., Stud Stock Salesmen. P.O. Box 462. Dunedin, N.Z.

or The Proprietor,

J. A. JOHNSTONE, Bushey Park, Palmerston South, N.Z.

TEVIOTDALE REGISTERED CORRIEDALES

The Drought Resisting Breed



These Sheep have been bred on the Teviotdale Estate for 38 years, and are the heaviest clipping Corriedales in the Dominion.

They are guaranteed to breed Absolutely True to Type.

They have been under the charge of the originator since the inception of the flock

TEVIOTDALE CHAMPION RAM.

Experience with these sheep during the recent drought at Tocal Station in Western Queensland, proves them to be ALL BUT DROUGHT RESISTING.

Where Merinos died, THE CORRIEDALES SURVIVED.

The recent successes of this flock comprise:—

At the Panama Pacific Exhibition

Reserve Champion Ewe

First and Second Prizes for Ram Lamb. First and Second Prizes for aged Ewes. First, Second, and Third for Yearling Ewes. Second for Yearling Ram. (No aged ram from this flock was exhibited.)

Corriedale Wool is the best for Khaki

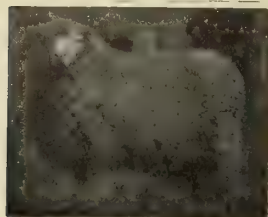
In the wool section at the Panama Exhibition, Teviotdale wool was the admiration of all experts, and secured the following awards: 1 gold medal, 2 silver medals, 1 bronze medal.

There is no doubt that the Corriedale is the future general purpose sheep for highest quality of wool and mutton.

At the scouring competition last November Teviotdale sheep again gained first place for heaviest fleece.

Rams and Ewes for sale in quantities

G. D. GREENWOOD (^{Originator}_{of the Breed}), Teviotdale, Amberley, New Zealand



MAJESTIC. Station bred.

Willigobung Romney Stud

REGISTERED FLOCK NO. 25 A.L.S. ASSOCIATION.

Founded 1910 from imported stock. Elham and Short blood and individual records kept. Bred on high basaltic country on natural grasses only, and are famed for their constitution and wool wherever introduced

For further particulars apply—

J. W. CUNINGHAM, COURABYRA, N.S.W.

Hilstead Romney Marsh Stud.

Combines the best English, New Zealand, Victorian and New South Wales Blood.

The Stud was founded by the purchase of fifty ewes and one ram—Cardington Supreme 1st—from the registered flock of Mr. Geo. F. Doyle, Cardington Hall, Molong, N.S.W., and by the purchase of the stud ram Egerton No. 77 of 1913 from the well-known registered flock of Mr. A. J. Hickman, Court Lodge, Kent. The flock has been from time to time added to by importations of the best English blood, five ewes from the flock of Mr. R. S. Strouts, Kent, in lamb to well-known registered rams, 10 ewes specially selected by A. Chapman (Secretary Kent or Romney Marsh Association), three special stud ewes from Mesham Flock, Kent, two ewes and one ram from the flock of Mr. A. J. Hickman, Kent. Further additions have recently been made from the flocks of Mr. A. J. Hickman, Mr. S. M. Osborne, Bolaro, N.S.W.; three prizewinners from Mr. A. E. T. Payne, Yarraview, Lilydale, Victoria; Messrs. V. H. and W. H. Yelland, Treverder, Newlyn, Victoria; Mr. Thomas McDowall, Brightside, Braidwood, N.S.W., and Mr. Geo. F. Doyle, Cardington Hall, Molong, N.S.W.

STUD AND FLOCK RAMS FOR SALE.

For particulars apply **J. B. SAUTELLE, Hilstead, Bibbenluke, N.S.W.**

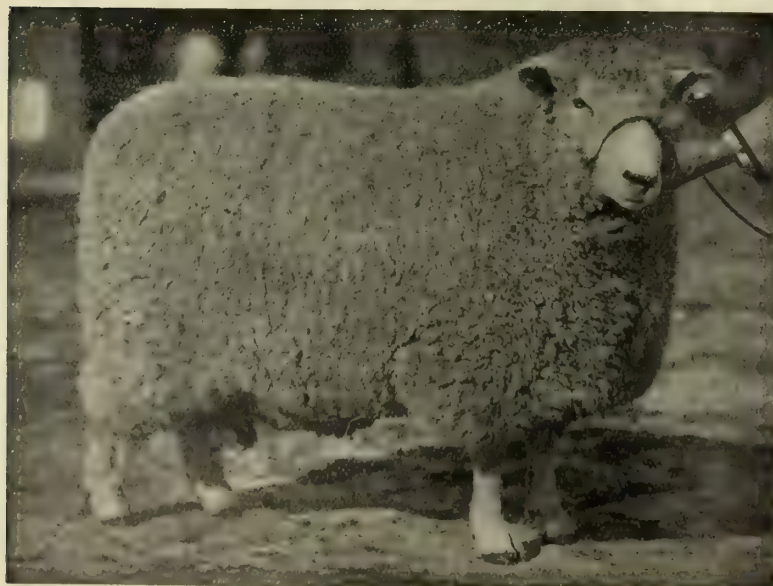


3 SPECIAL STUD EWES from the MESHAM FLOCK, KENT

WILLEROO ROMNEY MARSH STUD

REGISTERED IN THE AUSTRALIAN LONGWOOL SHEEPBREEDERS' ASSOCIATION FLOCK BOOK (FLOCK NO. 29).

The property of PAT. OSBORNE, Willeroo, Tarago, N.S.W.



Willeroo Ram No. 46 of 1915.

1st Prize and Reserve Champion at the Royal Show, 1917, 1st Prize at the N.S.W. Sheepbreeders' Show, 1917, and Grand Champion at the Melbourne Royal Show, 1918.

The Willeroo Rams also made the highest average price at the Sydney Stud Sheep Sales—an average of £56 17s., the highest average for Longwool Sheep in Australia.

THIS Flock was founded in 1910, and now comprises 1100 Stud Ewes. The Ewes purchased for this flock are from the registered flocks of Mr. J. E. Qusted, Kent, England; Mr. W. F. Jacob, New Zealand; Mr. G. F. Doyle, Molong, N.S.W., and from the late Mr. James Gibbs' flock, which was all pure Elham blood. Rams purchased for this Flock from England—in 1915 three from Mr. J. E. Qusted, in 1916 two from Mr. Qusted, one being the Champion at the Ashford Show and a First Prize Ram at the Royal Show, England; and one in 1916 from L. H. and G. W. Finn—this ram won the Championship for Wool at the Ashford Ram Show in 1916. Prizes won by this Stud in 1916, 1917, 1918 and 1919 at the Sydney and Melbourne Shows:—7 Grand Championships; 3 Reserve Championships; 38 First Prizes; 26 Second Prizes; 17 Third Prizes; and 3 First Prizes for Wool.

The Willeroo Romney Marsh Cross have also won First Prizes four years following, competing against all breeds at the Sydney Sheep Shows, as follows:—

First Prize for Pen of ten Fat Wethers for Export
First Prize for Pen of ten Fat Wethers, judged on Commercial Value.

First Prize for Pen of ten Fat Wether Lambs, judged on Commercial Value.

Stud and Flock Rams always on Sale. Full Pedigrees of all Stud Sheep are Kept.

FOR FURTHER PARTICULARS APPLY TO—

D. A. WHITE, Stud Manager, Willeroo, Tarago, N.S.W.

BOLARO ROMNEYS

Registered Aust. Longwool Sheepbreeders' Association, Flock No 23.

The PROPERTY of S. M. OSBORNE.

Bred on high country and **grass-fed**. Noted for **great constitution and very heavy, dense fleeces.**

The following prizes were won at the N.S.W. Sheepbreeders' Show, 1919 (the largest show of the breed in Australia):—Champion Ram, Reserve Champion Ram. 1st and 2nd prizes for ram over 2 years, 1st and 3rd prizes for ram over 1 year and under 2 years, 2nd prize for ram under 12 months. Reserve Champion, 1st and 3rd prizes for ewe over 1 year and under 2 years. 1st, 2nd and 3rd prizes for ewe under 12 months old, 1st and 3rd prizes for pen of 2 rams under 12 months old, 1st prize for pen of 2 ewes under 12 months old.

STUD and FLOCK RAMS always
on Sale at reasonable prices.

For further particulars apply—

FRANK FILE, "BOLARO,"
COOMA, N.S.W.



BOLARO No. 15 of 1916.
1st and Champion of N.S.W. Sheepbreeders' Show, 1919.

PENROSE STUDS of Pure Bred LINCOLN & ROMNEY Sheep.

Registered in the Lincoln Sheep Breeders' Association's Flock Book and the N.Z. Romney Association's Flock Book.



RANGATIRA V.
Lincoln Ram bred by Wm. Perry

ANNUAL SALE

is held during 3rd week in
January of each year.

For particulars
apply:—

Wm. PERRY, Penrose, Masterton, N.Z.

The Romney flock was founded from the flock of Mr. A. Matthews, more particularly through that great sire Premier L., who was the sire of Premier 267. Premier 267 has a very successful show record, only being beaten on one or two occasions and then by his flock mates. His sons have made record prices for N.Z. Romneys.



CHANCELLOR IV.
Romney Ram bred by Wm. Perry.

Cheviot Rams.

For Weight and Quality of Wool and for Mutton, combined with hardiness of constitution and activity, the CHEVIOT is outstanding. CHEVIOTS and their crosses have for years held leading positions in the Smithfield Carcase Competitions.

The Cross with the Merino is becoming more popular every year. Full particulars supplied by the Auctioneers, who will execute Commissions through a Shipping Agent.

**Andrew Oliver & Son, Auctioneers,
HAWICK, SCOTLAND.**



Shearling Ram, "Millknowe Victory," which made the Record Price of £620 at our 1919 Sale.

Streanshalh Corriedales



WHITE ROCK.

Bred at Streanshalh and winner of five championships and many first prizes.

Registered Flock No. 3.

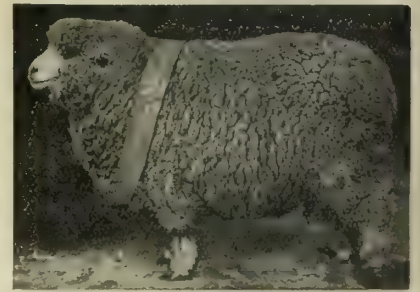
Founded in 1904 on the importation of 41 pure ewes and one ram from C. H. Ensor's White Rock (N.Z.) Stud, since when only the purest rams have been introduced.

The stud has been very successful at leading shows in Tasmania, while the wool from flocks that have used Streanshalh rams usually commands record prices in the Tasmanian market.

Stud and Flock Rams for Sale.

Apply the owner—

**NORMAN NICOLSON,
Streanshalh, Macquarie River, Tasmania.**



Grand Champion Corriedale Ram, Sydney, 1920. Purchased subsequently by N. Nicolson.

THE CARR'S PLAINS IDEALS

The IDEAL Sheep are finer in the wool than the Crossbred. They have been bred rather towards the Merino, and the fibre is more of the character usually yielded by a Comeback. This accounts for the high price obtainable for the clip, and gives it an unique character. The Carr's Plains Ideals are

AUSTRALIAN BRED SHEEP FIXED TYPES

They cut the same weight of wool as ordinary Merinos and get the same price, but they realise more per head for the whole fleece because they cut much more fleece wool and less skirtings than the Merino; also the carcase is bigger and returns more than Merinos.

For fuller particulars and samples of wool, write to:—

**H. H. WETTENHALL
AND SONS
Carr's Plains, via Stawell, Vic.**

WELLINGTON LODGE STUD South Australia.

Merino Sheep.

Pure bred for 60 years. Founded on Learmonth blood, and later Canowie, Wanganella, and Murray blood.

A few selected and flock 1918 rams for sale.

Shorthorn Cattle.

Pedigree Shorthorns of Angas, Derrimut and imported blood.

A few young bulls and heifers for sale.

Thoroughbred Horses.

Colts and fillies from yearling upwards, by Kerlie and Iownit, usually a few of each for sale.

Apply—

**ALLAN McFARLANE, Wellington Lodge, East Wellington, S.A.,
BENNETT & FISHER, Bowman Buildings, Adelaide.**

Quested's Romney Marsh Stud Flock and Herd of Pedigree Red Poll Cattle.



QUESTED'S No. 11 of 1917.

Champion Ashford Show, 1918. Sold by Public Auction for 1,000 guineas. Resold at Buenos Aires for record price of £1,600.

Over 500 PRIZES

Won for Sheep including :

CHAMPIONSHIP CUP for BEST FLOCK of ROMNEY MARSH EWES in England.

Championship Cup won at Ashford Show and Sale **Five Years in succession. TEN Challenge Cups** won outright at this Show.

1438 Stud Ewes to Ram in 1918.

Individual Pedigree of every sheep since 1894.

For particulars apply to Owner :

J. EGERTON QUESTED

"The Firs," Cheriton, Kent,
ENGLAND.

Cable Address : **ANIMALS SHORNCLIFFE CAMP**
Railway Station, SHORNCLIFFE, S. E. & C. Railway

The Sheep which sells to-day is the

Suffolk Sheep

Record after Record at Recent Sales. Demand from all Parts of the British Isles.



**Unbeaten
Record
on the Block.**

**Ideal
Hosiery Wool
—Good 56's.**

Ten Two-tooth Ewes sold for £500 (a record for ewes of any breed), Champion Pen Society's Sale.
Champions over all Breeds, London Smithfield Show, 1919.

Special Sales at Ipswich July, August and September.

For Full Particulars and Expert Selection apply to:—

THE SECRETARY, SUFFOLK SHEEP SOCIETY, 25 MARLBOROUGH ROAD, IPSWICH, ENGLAND.



LADY PRESIDENT 8th.
2 weeks old.

LADY PRESIDENT 4th.
3 years 11 months old. Weighed 1615 lbs.
at Aug. 1918 Brisbane National with Lady
President 7th as calf at foot and she took
1st prize then as cow 2 yrs. and under 3 yrs.

ISIS 2nd.
1 year 8 months old.

LADY PRESIDENT 7th.
1 year 1 week old.



9-month-old Bull Calves

High-class Stud and
Herd Bulls for sale.

All females and bulls
used in the herd are
entered in the Herd
Book.

Herd established near-
ly 50 years.



9-month-old Bull Calves.

CRESSBROOK HEREFORDS

Apply to—

EDGAR C. McCONNEL,
Cressbrook, Toogoolawah, Q.

BELLE VUE HEREFORDS.

The Estate of the late JAMES GIBSON, BELLE VUE, EPPING, Tasmania.



ROSADOR.

Bred by Henry Beattie & Sons, Vic. Sired by Royal Duke,
dam, Lady Roseberry 2nd. Purchased by the Trustees James
Gibson Estate in 1908.



BELLE VUE ROSADOR 4th.

Three years old. Bred by Trustees James Gibson Estate. Sired
by Rosador, dam, Lady Betty. Was Champion Hereford Bull at
the principal Tasmanian Shows in 1918 and 1919.

BELLE VUE MERINOS

Belle Vue is the home of the famous Sir Thomas flock All Belle Vue sheep
are descended from Sir Thomas and the same original lot of pure ewes.

FOR PARTICULARS APPLY—

THOMAS MUIRHEAD, The Manager, BELLE VUE, EPPING, Tasmania.



A great Herd, with a
wonderful Sire—
"PRESIDENT WILSON,"
3494 (imported),
purchased at 2220 Guineas—
at its head.

Bushy Park Stud of HEREFORD CATTLE

This Herd is now composed of a small but very select group of magnificent Cattle, every individual in which is first-class. In fact, it may safely be said without the slightest exaggeration that in no part of the world could they be excelled.

Possessing as they do the great advantage of being reared under natural conditions, absolutely without housing or forcing—even those which are being prepared for Showing being left out at night—it will readily be seen how valuable they must be for breeding good sound-constituted stock. None but long-pedigreed animals are kept in this Herd.

Efforts are now being made to secure shipping for stud stock from New Zealand to South America, which will no doubt be arranged within the next year or so, and it behoves all Hereford breeders to place themselves in a position to take advantage of this great market.

There are now available for private sale at Bushy Park the following high-class Bulls at very reasonable prices:—

Two two-year-old Stud Bulls by "Rufus" (imp.)

A grand selection of Stud Yearling Bulls by "Rufus" (imp.): "Elect 19th," "Maymorn" and "Count Rufus."

And this season the first crop of calves by "President Wilson" (imp.) will make their appearance.

There is also a splendid lot of two-year-old Run Bulls and a few Run Yearlings, all of which have been handled and tied up.

For Further Particulars apply to:—

FRANK MOORE
BUSHY PARK, KAI IWI
WANGANUI, NEW ZEALAND.



GUNYAN HEREFORD STUD HERD.



MAGNITUDE (imp.)

STUD & HERD BULLS FOR SALE

All Females are eligible for Entry in A.H.H.B.

Stud Bulls in use at present—

Magnitude (imp.), winner Championship, Brisbane, 1918, Roador 2nd (First Prize, Sydney), Wonder 3rd (First Prize, Sydney), Sir Edgar (First Prize, Sydney), Lord Lyndley (First Prize, Brisbane).

Apply to

TINDAL & SON, Gunyan, Texas,
via Inglewood, Queensland.

LYNDLEY HEREFORDS

Founded on Reynolds, Beattie & Imported Stock.

All herd bulls are pure bred, only Stud Book bulls and cows used.

Lyndley Herefords exhibited since 1913 on 7 occasions and have won 8 Championships, 11 Reserve Championships, 58 firsts and 35 seconds, and hold the Australasian record price 1125 gns.

Stud bulls and heifers for sale. Also pure herd bulls.

Inspection Invited.

Apply **JAMES SPARKES, LYNDLEY, JANDOWAE, QUEENSLAND**



MANSEL LIBERATOR (imp.) 37,370 E.H.B. Age 2 years 2 months.
Champion Queensland 1920. Now used in Lyndley Stud.

EAST TALGAI ABERDEEN ANGUS STUD

The East Talgai Aberdeen Angus Stud was formed some years ago by the importation of 8 high-class cows and a bull from the leading studs in New Zealand. In 1917 the whole of the Boolarwell, Queensland, stud of pure cows was purchased and since then two high-class stud bulls have been secured at high figures, viz., Mahoe of Akitio, bred by F. Armstrong, Akitio, N.Z., and Proud Peer of Tolarno, bred by the late W. C. Grubb, of Tasmania, both of which are now in use in the stud. The herd at present consists of about 70 breeding cows with a fine lot of heifers coming on. Numerous prizes have been taken at the Brisbane Exhibition and other Shows in Queensland.



"DUKE OF GORDON OF TALGAI" 2 years, 2 months old.
"BLACK JUNO." 12 months. Both by Bonnie Dundee (imp.)
dam Minerva (imp.).



MAHOE OF AKITIO (imp.), 22 months old. Now in use in stud.

The 1919 drop of bull calves will be ready
for Sale towards the end of this year.

Apply **GEORGE C. CLARK, East Talgai, Elinthorp, Queensland.**

Mrs. C. Lumley Hill.

BELLEVUE STUD HEREFORDS

Bellevue, Queensland

Composed of Pedigree Cows with pedigrees running back ninety years in Stud Books, including such famous Championship Sires as:—"Field Marshal," "The Admiral," "Lord Clare," "Lloyd George" and "Lovelace" (imp.), bred by Sir John Cotterill, Bart., Gamons, Herefordshire, England. Best class Pedigree Stud Bulls and Herd Bulls for sale by Stud Book Sires from England, New Zealand and Southern Colonies.

Apply to **THE MANAGER, Bellevue, Q'land.**



"LOVELACE" (imp.)
1st Royal Show, Cardiff, Wales, England, under 12 months 1919.



COMMODORE 2nd. By MAGNITUDE (imp.)
At the age of 2 years and 3 months.

RAMORNIE HEREFORD STUD HERD

Founded on stock from the famous Gunyan Stud.

Stud and Herd Bulls for sale.

All Herd Bulls are pure bred, only Stud Book Bulls and Cows used.

Apply:—

C. H. TINDAL, Ramornie, Copmanhurst, N.S.W.

The MICALAGO Stud

**The property of the Executors
of the late Hon. A. Ryrie, M.L.C.**

The Micalago Hereford Stud is founded on Stud Bulls and Heifers purchased from the noted breeders, Messrs. S. Reynolds, "Duninald," Patterson, N.S.W., P. Reynolds, "Hobartville," Richmond, N.S.W. The Stud is noted for robustness of constitution, bred and reared 2301 ft. above sea level.

In 1920, the "Hereford Stud" gained two (2) Champion Prizes, nine (9) Firsts, one Second at Southern Shows, and, in a field of 36, in the class one year and two, at the Royal Jubilee Sydney Show, Third Prize with "Paris," by "Monte Carlo" 3rd, No. 732 A.H.B., Dam, "Spot" 13th, Vol. 6, A.H.B. In 1921 the Stud won two Championships, six First Prizes and one Second.

Inspection invited, apply

The Manager. "MICALAGO," Michelago, N.S.W.



MONTE CARLO 3rd.
No. 732, A.H.B.



EATON CONQUEROR. (IMP.)
Aged 2 years 2 months. Live weight, 1820 lbs

Hobartville Stud

Hereford Cattle. ♂ Thoroughbred Horses.

High-class Stud Stock for Sale. Inspection Invited.

Apply **PERCY REYNOLDS, Hobartville, Richmond, N.S.W.**

BENVENUE STUD HERD OF HEREFORD CATTLE.

Established at "Benvenue," Singleton, N.S.W., in 1873.

The **W.W. BRAND** is well known in Queensland.
IMMUNE.

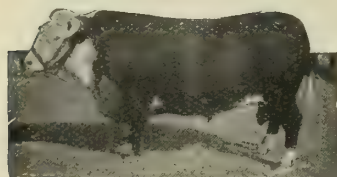


LANSDOWNE (imp.), 2 years 5 months.

**STUD & HERD BULLS
FOR SALE.**

All herd bulls are pure bred.
Inspection invited.

**H. H. WADDELL,
Benvenue,
GAYNDAH, Q'LD.**



**"COTMORE"—1st Prize Grand
Champion R.A.S. Sydney, 1911.**

DUNINALD Stud and Herd.

HEREFORD CATTLE.

Stud Bulls and Heifers for Sale; also Pure Herd Bulls. All Herd Bulls bred at Duninald are pure bred. Inspection invited.

Correspondence should be addressed—**S. REYNOLDS, Duninald, Paterson, N.S.W.**

"ABBAY GREEN" STUD & HERD HEREFORD & DEVON CATTLE

The "Abbey Green" Hereford and Devon Herds were founded by the purchase of bulls and cows from the best herds in New South Wales and South Australia in 1908. Only best bulls procurable used since.

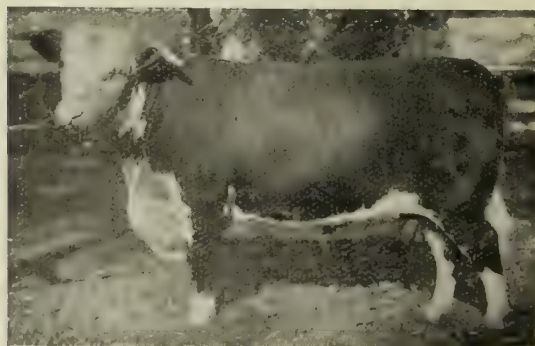
The cattle are noted for their hardiness, being bred 5000 feet above sea level, and mature very quickly when taken into hot climates.

YEARLING STUD AND HERD BULLS FOR SALE

Full particulars from **H. W. CURTIS, "Abbey Green," Llangothlin, N.S.W.**



**"Curley" 96, aged 4 years. Used in
Abbey Green Hereford Stud, 1918-20**



CORNCRAKE (Imported), aged 3 years and 3 months.

CONDELL PARK

HEREFORD CATTLE. BERKSHIRE PIGS.

Cows are culled heavily every year, and only the best bulls used.

All herd bulls are pure-bred, and eligible for entry in the Australian Hereford Herd Book.

The pigs are noted prize-takers at the R.A.S. Sydney Show.

**STUD and HERD BULLS. INSPECTION INVITED.
STUD PIGS FOR SALE.**

Apply

A. L. HARRIS, CONDELL PARK, MALDON, N.S.W.

GISBORNE PARK STUD HEREFORDS

English Leicester and Corriedale Sheep

THE HEREFORD STUD was founded 1860 from imported stock. Noted for robustness of constitution, heaviness of flesh and true-ness of type. Bred and reared nearly 2000 feet above sea level.

The whole Stud has been tested with Tuberculin, and found sound and free from Tuberculosis.

THE ENGLISH LEICESTER STUD was founded 1908 on the good old New Zealand blood. Noted for their hardy constitution and early maturity.

THE CORRIEDALE STUD was formed 1920 on ewes personally selected from leading New Zealand Studs. Famous for wool and mutton. The utility sheep.

J. A. BEATTIE **GISBORNE PARK**
Phone 13 — **GISBORNE**



ROYAL BOY 4TH. Stud Sire at 3 years.

Stud Bulls and Heifers for sale; also Pure Herd Bulls.

All Herd Bulls bred at Tocal are perfectly pure bred, which gives them a great advantage over the ordinary grade bulls.

Inspection invited.

Correspondence should be addressed—

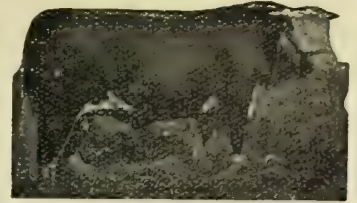
TOTAL Stud and Herd.

Hereford Cattle

and THOROUGHBRED HORSES.

*The Oldest Herd in Australia.
Established at Tocal in 1844.*

Estate F. REYNOLDS, Tocal, Paterson, N.S.W.



"WONDER."



NEW YEAR'S GIFT. 18 months old.

Bred at Gracemere. Sire, Prince Regent 534. Dam, Fancy 215.

GRACEMERE & TORSDALE STUD HERDS

Shorthorns. Herefords. Red Polls.

HIGH CLASS BULLS FOR SALE.

Bred on Red Water Country and inoculated for Pleuro.

ARCHER BROS. Ltd., Gracemere, Qld.

MANSEL COURT STUD HERD.

THREE FIRST-PRIZE WINNING YEARLING BULLS

*From a pen-and-ink sketch by
Frank Calderon, R.A.*

Reading from the left: MANSEL BANNER MASTER (37354), 1st prize Royal Show, 3rd prize Worcester; MANSEL BANNER GUARD (37350), 1st prize Royal Counties Show; MANSEL BANNER REX (37359), 1st prize Bath and West, 1st prize Hereford and Worcester Agricultural Society's Show.

Four first prizes have thus been won by three different bulls from one herd—a record.

Apply to—

CAPTAIN R. T. HINCKES,
Mansel Court, Hereford, England.



ROYAL FAME at 9 months.

Amateur Kodak enlarged.

GARNONS HEREFORDS

The property of

Sir J. R. G. Cotterell, Bart., Garnons, Hereford,
England.

ROYAL FAME, v. 51, at 9 months. Sire Sovereign 35628, dam Queen Elizabeth by Administrator 27298. Bred by Sir J. R. G. Cotterell, Bart. Sold at a high price to Senor Rodriguez, Uruguay.

During the last 20 years the Garnons Herd has won some 200 Champion and other prizes at all leading Breed and Fat Stock Shows in England. Stock Bull Saladin 31957, sire of Sovereign 35628; 1st and Champion Herefordshire and Worcestershire A.S.; 1st and Reserve Champion Royal Agricultural Soc., Cardiff; 1st Lord Tredegar's Newport, and sold for 4,000 gs.; Lovelace, 1st Royal Agri. Soc.; Minstrel, 1st Royal Counties, Reading; Steer, 1st Smithfield Club.

Catalogue of Herd on application.

LYNDHURST STUD, WARWICK, Q.



LYNDHURST ROYAL PEER.

Champion Bull, Brisbane, 1912-13-14-15; Toowoomba, 1914-15;
Warwick, 1911-12-13-14-16-17.

MURWEH, Charleville, Q.

THE MURWEH SHORTHORN STUD was formed in 1917, 400 high-class cows and heifers being sent there from Dulacca West with a number of high-class stud bulls, Lyndhurst bred, many of them prize takers, also the New Zealand bull, Diamond Crest. On the rich western country these cattle have done exceptionally well. The young bulls now for sale at Murweh are a very fine lot

Stallion—Hartfell. Ayr Laddie ex Light Heart, 10 gns.

NOW FOR SALE—Murweh:—500 Bulls Lyndhurst, Dulacca West and Murweh bred, 2 and 3 years old. For particulars apply—

C. E. McDOUGALL, LYNDHURST, WARWICK, Q.; or McDOUGALL & CO., WARWICK, Q.

Pure Shorthorn Stud and Herd Bulls

Combining robust constitutions with depth of flesh and quality. The Sires used in the Lyndhurst Stud have all been prize winners and include Bapton's Patriot (imp.), Clippers Duke (imp.), Hampton Bowling (imp.), and Clogher Augustus (imp.). First Sydney and Champion Brisbane. The Sires now in use are Lyndhurst Royal Peer (winner of 13 Champion prizes, including 5 Brisbane Champions), Clogher Augustus (imp.), Lyndhurst Royal Peer 11th (4 Firsts Brisbane and Reserve Champion), 3rd Duke of Ettrick, and Lyndhurst Royal Peer 13th.

The cows are mostly direct descendants of 4 cows imported by the late Hon. J. D. Macansh in 1875, and include 25 cows selected from Mr. Baldwin's Durham Court stud in 1913.

The Lyndhurst cattle have been very successful at the Queensland National Association Show, Brisbane, having won 7 Championships with bulls and 4 with cows during the last 12 years, also any number of class and group prizes.

STALLIONS.

Chantemerle (imp.) Polymelus ex Amphoraria	...	...	...	50 gns.
Seremond (imp.) Desmond ex Serenata	...	...	...	30 gns.

DULACCA WEST STUD, Roma, Q.

THIS SHORTHORN STUD was formed in 1904 with 100 Lyndhurst Stud cows and has since been added to each year from Lyndhurst Stud; also includes purchases from Baldwin's Durham Court Stud. The sires in use are all high class and mostly prize takers.

"MILTON PARK" SHORTHORNS

A FEW
YOUNG
STOCK
FOR
SALE.



MASTERKEY (imp.)

"Masterkey,"
sire of
the winning
female
group at the
Royal Show,
of England,
1920.

For particulars of Stock For Sale, apply to—

The Manager, "MILTON PARK," Bowral, New South Wales.

BINNIA DOWNS SHORTHORNS



BARITONE

Champion Shorthorn Bull, Sydney Royal, 1918; 1st and Champion, Sydney Royal, 1920, and Governor-General's Cup; 1st and Champion, Melbourne Royal, 1920, and winner of Gold Medal awarded by the Shorthorn Society of Great Britain and Ireland. Bought for 1,700 guineas. Now being used in the Binnia Downs Stud.

THE FEMALE STOCK ARE AN EXCEPTIONALLY HIGH-CLASS LOT.

STUD AND HERD BULLS FOR SALE.

For particulars apply—**J. McMASTER, Binnia Downs, Coolah, N.S.W.**

Founded in 1908, and built up on the best blood procurable from leading Victorian studs—J. E. Robertson, Glen Alvie; A. J. Simpson, Clifton; John James, Derrimut; Ball Bros., Zaretan; A. J. Webb, Rathfarnham; N. Falkiner, Noorilim, etc.

The following additions to the stud were made by purchase at the Sydney Royal Show, 1918:—

Stud Bull BARITONE, 2 years 7 months, at 1,700 guineas, from Messrs. Parsons & Robertson, Watch Hill, Vic.

Stud Bull HIGHTON DUKE OF DERRIMUT, 12 months old, at 1,000 guineas, from Messrs. Lidgett Bros., Vic.

Stud Heifer ROYAL JESSA-MINE 89th, at 400 guineas, from Messrs. Parsons and Robertson, Vic.

Stud Heifer DUNDAS DUCHESS OF DERRIMUT 13th, at 400 guineas, from Mr. A. J. Simpson, Clifton, Vic.

Edgécote Filbert (imp.) 1075 gns. **Rose of Chedglow** 51st (imp.) C.H.B. Vol. 65.

Bianca Belle 9th (imp.) C.H.B. Vol. 64.

Hilda Warden (imp.) C.H.B. Vol. 64

Aikbank Undine 4th (imp.) C.H.B. Vol. 64.

HAMBLEDON HILL SHORTHORNS

Bulls for Sale.

Bolinda Duke of Derrimut 425th

White,
Calved August, 1917.

Sire,

Bolinda Duke of Derrimut 391st.

Dam,

Bolinda Duchess of Derrimut 468th



"GRAND DUKE CLIFTON."

The Stud Sire in use from 1st February, 1921.

Bulls for Sale.

Hambledon Duke of Derrimut 4th.

Dark Red,
Calved Nov., 1920.

Sire,

Zaretan Duke of Derrimut 24th.

Dam,

Bolinda Duchess of Derrimut 486th

Lloyd Jones, Hambledon Hill, Singleton, N.S.W.

BARRAGAN STUD AND HERD

No pampering———All grass fed———Rich colours.

50 Years of careful breeding.

THE BARRAGAN HERD was founded nearly 50 years ago by the late E. Tindale, by the purchase of choice cows from the stud of the late Thos. Lee, Woodlands, Bathurst, and at the clearing sale of W. and J. Lee, of Millbank, Bathurst whose cattle were descended from the original stud of Wm. Lee, Claremont, Bathurst. Sires used were from the studs of S. Gardiner; Robertson Bros., Colac; J. H. Angas, and the choice of John Lee-of Bylong's bulls. Duchess females were also secured from the McCulloch dispersal sales.

The present owner purchased the above foundation, and has since added from the last McCulloch dispersal other females of the Persis (imp.), Lobelia (imp.), May Rose, Lady Weston, and Charmer strains; also the imported bull Prince Millicent (96519).

Bulls now in use were prize winners in large classes at Royal Sydney and Royal Melbourne Shows—Lord of the Vintage and Mahonga's Comet.

Stud and herd bulls eligible for entry in the herd book for sale.



PERSIS VII.

Also pure pedigreed Berkshire pigs and Lincoln rams (registered flock).

The property of

R. S. HARRIS, BARRAGAN, BARRAGANDAH, VIA MUDGE. N.S.W.

Telegrams—WOLLAR.

COOMBING PARK SHORTHORNS



BOLINDA DUKE OF DERRIMUT 400th.

Founded on high-class female stock of Lee and Lowe blood. Extensive purchases of pedigreed cows have also been made from the studs of the late James Holmes, Bathurst; Sir Rupert Clarke, Bolinda Vale; and Mr. Norman Falkiner, Noorilim, Victoria.

The bulls now in use are from
Bolinda Vale.

**STUD AND HERD BULLS
FOR SALE.**

THE WHITNEY PASTORAL CO., Coombing Park, CARCOAR, N.S.W.

CLIFTON STUD Shorthorns

Old Established Herd of High-Class Shorthorns.

Carefully bred for constitution, quality and early maturity. Winners of many Champions and numerous other prizes at Sydney, Melbourne and Brisbane Shows. Where young sale stock command top prices.

A. J. SIMPSON, CLIFTON, HAMILTON,
VICTORIA.



A Noted Clifton Stud Cow
BOLINDA DUCHESS OF DERRIMUT 400th.



DIAMOND FAIRY.—1 & R.C., Hastings, 2, Palmerston N., 1916; 1, Hastings, 2 & R.C., Palmerston, 1 & C., Carterton, 1 & C., Wanganui, 1917; 1 & C., Masterton, 1 & C., Marton, 1 & R.C., Hastings 1 & C., Carterton, 1 & R.C., Palmerston N., 1 & R.C., Feilding, 1918; 1 & C., Marton, 1 & C., Taihape, 1, Hastings, 1919, and winning sire with progeny.

BLAIR ATHOL STUD SHORTHORNS

First-Class Stud and
Herd Bulls for Sale.

Write for
Particulars

DALZIELL BROS.,
Hunterville, North Island, New Zealand.



2-YEAR AND 3-YEAR HEIFERS.

BRUNETTE DOWNS (N.T.) STUD SHORTHORNS

*BULLS for Western Australia
and Northern Territory*

At **BRUNETTE DOWNS, N.T.,** via Camooweal, Q.

Bred on Tick Country

200 eighteen months to two years

By Bulls from Studs of Dangar, Bracker, McDougall, Lomax and Cotton, out of progeny of a stud herd of Cows sent from the A. A. Co.'s Gloucester property

Price : **£12/12/-** at Station.

Road is now open to the West by Government bores.

Apply—

DALGETY & CO. Ltd.
BRISBANE, Q.; PERTH, W.A.

THE JERULA SHORTHORN STUD

THE PROPERTY OF
COLIN CAMPBELL, Jerula, near Cowra, New South Wales

THE COWS of this Stud have been bred up from the Stud of the late JOHN LEE of Bathurst, and have been successful prizetakers.



NYINGAY WIDE 5th (at 33 months). Realised 400 gns. R.A.S. Sydney Sales, 1916.
Purchased by Mr. Colin Campbell, of Jerula, Cowra, N.S.W.
Bred by Mr. Roy Simson, Mungadal, Hay, N.S.W.



"MOOKI ROTHERFIELD"
Now in use at Mooki Stud

R. R. DANGAR.

Mooki Springs Shorthorns

HIGH-CLASS STUD and
HERD BULLS FOR SALE.

APPLY THE MANAGER,
Mooki Springs, Quirindi, N.S.W.

The Nyingay Shorthorn Stud

THE PROPERTY OF
ROY SIMSON, Mungadal, Hay, N.S.W.

This stud was formed in 1902, and has been continuously selected for the production of sorts that are robust and deep fleshed.

Stud and selected bulls usually
— for sale; also heifers. —



NYINGAY SUMMERTON 7TH (Grass-fed). One of the stud sires.



ZARETAN DUKE OF DERRIMUT 22nd.
Purchased at the 1917 Sydney Royal Show for 400 guineas, and is now used in the stud.

GRAMPIAN HILLS SHORTHORN STUD

The Property of A., R., and F. BOWMAN,
Grampian Hills, Bunnan, New South Wales.

This stud was started in the early forties, and its purity has been maintained ever since by the use of the best bulls procurable.

At the Sydney Royal Show, 1918, Grampian Duke of Derrimut 6th was sold for 950 guineas.

STUD BULLS & COWS & HERD BULLS FOR SALE.

For full particulars apply to

A. BOWMAN, 279 George Street, Sydney,
or to the Manager, Grampian Hills, Bunnan.

R. C. FIELD

Westfield

Westbury

Tas.



Shorthorn Stud

Founded on pure stock purchased from the Van Diemen's Land Co. about 1840. Only best blood used since.

STUD AND HERD BULLS FOR SALE.

Belmont Park Stud

RED POLLED CATTLE

Herd established 1891.

Stud bulls, heifers, and herd bulls for sale.

All herd bulls are pure bred.

Price, from 35 guineas.

Inspection invited.

Apply—**Philip Charley, Richmond, N.S.W.**



Honingham Astrologie (imp.) 10,303.

COLLENDINA SHORTHORNS.

The Property of Henry Hay & Son.



Foundation:
Cows
purchased
from
Bolinda Vale.

Valuable
Young
Stock
for
Sale.

COLLENDINA DUCHESS OF DERRIMUT 21st.

By Collendina Duke of Derrimut 11th out of Collendina Duchess of Derrimut 5th.

COLLENDINA CORRIEDALES

Pure Corbett Blood.

(Registered Flock No. 12, Australian Corriedale Sheepbreeders' Association.)

For particulars apply—**HENRY HAY & SON, Collendina, Corowa, N.S.W.**



Ryeland Ram Lamb, 10 months.
Bred by C. H. Hobbs, 1919.

Oldport Flock & Shorthorn Herd.

Ryeland Sheep Flock No. 11, and Bates Cattle
of Good Families,

With Scale, Good Coats, and Dark Colours.

RYELAND SHEEP—a breed not widely known but possessing a very great merit, both as regards Closeness and Quality of Wool, combined with an Excellent Carcase, a very Hardy Breed that thrives on hard keep.

PRIZES WON AT BREED SHOW, 1918-19.

RAMS AND BULLS FOR SALE.

Apply: C. H. HOBBS, Oldport, Oswestry, Salop.



Ryeland Ram Lamb, 10 months.
Bred by C. H. Hobbs, 1919.

THE SIRE

AND PEDIGREE OF THOMSON'S FAMOUS WAI-RONGOA CLYDESDALE STUD
OTAGO - NEW ZEALAND.

Imperialist (11376)

Sire, Hiawatha (10067), Vol. XVIII.
Dam, Olive of Jordanstone (12725), by Prince of Carruchan (8151), Vol. XII.
Gdam, Netty II. of Jordanstone (10439), Vol. XIV., by Lucky Getter (1483), Vol. III.
GGdam, Jordanstone Jean (35), Vol. II., by Young Baronet.
GGGdam, Jean.

Oyama (13118), Vol. XXVIII, p. 528.

Sire, Baronson (10981), Vol. XXIII.
Dam, Scottish Princess (12916), Vol. XIX., by Price of Cathcart (8915), Vol. XIII.
Gdam, Bess of Barbish (12596), Vol. XVIII., by Top Gallant (1850), Vol. IV.
GGdam, Maggie of Bugliehill (9085), Vol. XII., by Boydston Boy (III.), Vol. I.
GGGdam, Nannie, by Prince Alfred (618), Vol. I.

Scotland Yet (14829), Vol. XXXI, p. 777.

Sire, Royal Favourite (10630), Vol. XXI.
Dam, Chester Princess (16371), Vol. XXVII., by Baron's Pride (9122), Vol. XIV.
Gdam, Orphan Princess (13281), Vol. XX., by Prince of Fashion, Vol. XII., p. 361.
GGdam, Princess II. (10556), by Darnley (222).
GGGdam, Princess of Girvan (4661), Vol. VIII., by Lord Lyon (489), Vol. I.
GGGGdam, Louise (538), by Prince of Wales (673).

Up-to-Time (10475), Vol. XX, p. 249.

Sire, Baron's Pride (9122), Vol. XIV.
Dam, Rosie of Comptoned (6536), Vol. X., by Macgregor (1487), Vol. III.
Gdam, Lovely II. (1500), Vol. V., by Monkland Farmer (543).

GGdam, Lovely of Banks (266), Vol. II., by Lochfergus Champion (449), Vol. I.
GGGdam, Sally, by Lothian Tam (506), Vol. I.

Dunure Footprint (15203), Vol. XXXII, p. 933.

Sire, Baron of Buchlyvie (11263), Vol. XXIV.
Dam, Dunure Ideal (21283), Vol. XXXI., by Auchentower (12007), Vol. XXVI.
Gdam, Royal Darling (14201), Vol. XXIII., by Royal Champion (8956), Vol. XIII.
GGdam, Darling of Red Hall (12523), Vol. XVIII., by Gartsherrie (2800), Vol. VI.
GGGdam, Scott (9541), Vol. XIII., by Simon Pure (769).

GGGGdam, Smiler, by Clydesdale Tam (176), Vol. I.

GGGGGdam, Jeannie, by Merrie Tom (532), Vol. I.

GGGGGGdam, Smiler, by Scotchman.

Sir Hugo (10924), Vol. XXII, p. 321.

Sire, Sir Everard (5353), Vol. IX.
Dam, Jess of Woodyet (13814), Vol. XXII., by Lord Reay, Vol. X., p. 401.
Gdam, Nancy (13813), Vol. XXII., by Jock (404), Vol. I.

Sir Everard (5353), Vol. IX, p. 519.

Sire, Top Gallant (1850), Vol. IV.
Dam, a Dark Brown Mare, grey hairs in coat, bred by Mrs. Lamont, by London Prince (428), Vol. I.

Gdam, Dam of Hawkie (70), Vol. II., by General Williams (326), Vol. I.

GGdam, a Mare by Round Robin (721), Vol. I.

GGGdam, a Mare by Farmer (290), Vol. I.

Silver Cup (11184), Vol. XXIII, p. 289.

Sire, Baron's Pride (9122), Vol. XIV.
Dam, Balmiedie Vesta (13911), Vol. XXII., by Macgregor (1487).
Gdam, Maggie of Muirhousehead (10885), Vol. XIV., by Lord Lyon (489), Vol. I.

GGdam, Old Nancy, by Clyde (164), Vol. I.

GGGdam, by Rob Roy (714), Vol. I.

Ascot (10494), Vol. XXI, pp. 186/7.

Sire, Macgregor (1487), Vol. III.

Dam, Princess (6269), Vol. X., by Prince of Wales (673), Vol. I.

Gdam, Jean of Foreside (2790), Vol. VI., by Young Lord Lyon (994), Vol. I.

GGdam, by Prince Alfred (619), Vol. I.

GGGdam, Hawkie, by Samson (741), Vol. I.

Bonnie Buchlyvie (14032), Vol. XXX, p. 935.

Sire, Baron of Buchlyvie (11263), Vol. XXIV.

Dam, Queen of Beauty (14850), Vol. XXIV., by Macgregor (1487), Vol. III.

Gdam, Lady Louise (12036), Vol. XVI., by Prince of Wales (673), Vol. I.

GGdam, Violet of Portenacaille (9503), Vol. XIII., by Darnley (222), Vol. I.

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GGGGGdam, Mall, by Defiance (225), Vol. I.

GGGGGGdam, a Mare by Farmer (292), Vol. I.

Baron of Buchlyvie (11263), Vol. XXIV, p. 248.

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Gdam, Maybloom (4157), Vol. VII., by What Care I (912).
GGdam, Bloom (571), Vol. III., by Blooming Heather (1071).
GGGdam, Wardell.

Revelanta (11876), Vol. XXV, p. 347.

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Hiawatha (10067), Vol. XVIII, p. 211.

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Royal Favourite (10630), Vol. XXI, p. 230.

Sire, Royal Gartly (9844), Vol. XVI.
Dam, Rose of Arnprior (12754), Vol. XIX., by Brooklyn (6547).
Gdam, Lily of Nethercarce (7649), Vol. XI., by True Blue (1334), Vol. II.
GGdam, Jean of Chartershall (7380), Vol. XI., by Black Comet (66), Vol. I.

Baron's Pride (9122), Vol. XIV, p. 536.

Sire, Sir Everard (5353), Vol. IX.
Dam, Forest Queen (7233), Vol. XI., by Springhill Darnley (2429).
Gdam, Forest Mallie (4740), Vol. VIII., by Pretender (599).

GGdam, Mall, by Clydesdale Tom (177), Vol. I.

Forest Queen (7233).

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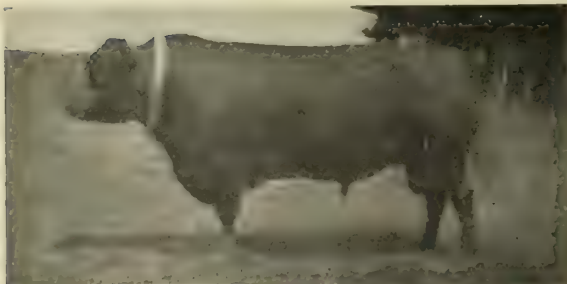
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At Camperdown, 1.30 p.m.

**120 Pure Shorthorn Cattle,
Young Horses and Ponies**

STANSMORE & CO. (Camperdown) and
CRAWFORD, DOWLING & SEYMOUR
(Ballarat), Auctioneers in conjunction,
have been instructed by the Executrix of
John Cumming, deceased, to sell as above
the whole of the Sheep, Plant (including
Hornsby 8-h.p. Oil Engine), Implements,
Cattle, and Horses of the Mt. Violet Estate.

9000 PURE MERINO SHEEP.

These are nearly all Breeding Ewes (including 500 Studs), and they are pure Tasmanian descendants from the Sir Thomas Flock. Only Winton and Bellevue Rams were used in the Stud until 1917, when Messrs. Beggs' fine Merino Rams were introduced.

6000 COMEBACK SHEEP.

The Comeback Sheep are nearly Merino, as no Rams but Merinos have been used since 1916.

Railway Arrangements.—Buyers from Melbourne and Riverina will require to leave Melbourne on the 4.35 express for Camperdown on Wednesday, 11th May, and Warrnambool and Hamilton on day of sale by the train arriving at Camperdown at 8.45 a.m. Convenient evening trains leave Camperdown on day of sale for return.

SPECIALLY NOTE.—It will be wise for Buyers to book accommodation at an early date, and also advise the Agents to reserve seats in cars that will be running to the Sale.

LUNCHEON PROVIDED.

Fuller Particulars from the Agents—
STANSMORE & CO., Camperdown.
CRAWFORD, DOWLING & SEYMOUR.
Ballarat.
Or for Plant and Implements, Goodall & Sons, Engineers, Mortlake.

FOR SALE BY AUCTION

The well-known Darling Downs Estate, JIMBOUR HOMESTEAD.

By order of the Mortgagees, Messrs. MOREHEADS LIMITED will offer by Public Auction

On TUESDAY, 26th APRIL, 1921, at 3 p.m. sharp,

At the WOOL EXCHANGE, Parbury House, BRISBANE,

the well-known Homestead Block of that Estate, comprising, viz.:—

AREA—5939 acres freehold. **SITUATED**—16 miles from Dalby—the Dalby-Jandowae Railway line skirts the boundary, the Jimbour Railway Station and Trucking Yards being situated within a mile of homestead—65 miles from Toowoomba, and 165 miles from Brisbane. **COUNTRY**—About three-quarters of the area is rich agricultural land, mostly black soil and ready for the plough. About 1400 acres have been cultivated; the balance is well-grassed, lightly-timbered ridges. The carrying capacity under natural grasses and herbage exceeds a sheep to the acre in average seasons. As wool-growing country is absolutely first-class. **WATER**—Well and permanently watered by Jimbour and Cattle Creeks, six sub-artesian bores and wells, all fitted with windmills, pumps, tanks, and troughing. **IMPROVEMENTS**—The homestead is a very large two-storied stone building, and numerous outbuildings, store, stables, &c., horse, cattle and sheep yards, woolshed, and subdivided into a large number of grazing and cultivation paddocks by sheep and cattle-proof fencing. A good seam of coal underlies the homestead at a depth of about 60 feet, and has been worked for the use of the station.

JIMBOUR is admirably adapted for either Stud Cattle or Horse Breeding, for which it has been used for many years, the cattle on the natural grasses growing to great size and weight.

Exceptional Terms will be given to purchaser, viz.:—

Deposit 10 per cent. cash, balance in 10 equal annual payments bearing interest at 6 per centum. Interest payable half-yearly.

Inspection can be made at any time prior to sale.

For fuller particulars apply to—

MOREHEADS LIMITED, Brisbane, Auctioneers.

ANNUAL STUD SHEEP SALES

Stud Rams and Ewes.

THE VICTORIAN PRODUCERS' CO-OPERATIVE CO. Ltd., Pure Stock Salesmen, 589-605 Collins St., Melbourne, will offer on behalf of the Leading Breeders of Victoria, South Australia, New South Wales and Tasmania, Merino and British Breeds of Sheep in our Wool Stores at Macaulay, on

WEDNESDAY, 3rd AUGUST, 1921.

Victorian Producers' Co-op. Co. Ltd.
589-605 Collins Street, Melbourne.

YOUNG man, 12 months' experience, wishes employment as Jackeroo on Station. Good references. Public School. Letters addressed

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Equal to any British Breed in Size of Carcase, Weight of Wool, and Length of Staple.

Unrivalled for crossing purposes to secure increased depth of flesh, weight of carcase, together with heavier fleeces and increased length of staple. Hardy and full of constitutional vigor, with remarkable aptitude for early development. Two hundred registered flocks to select from.

Ram Sales held annually at Totnes and South Brent, Devon, and Liskeard, Cornwall, in August; and at Truro in September.

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Mowbray House, Norfolk St., Strand,
London, W.C., England.

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to express my high appreciation of Sheep, Farm and Station Management,
which I have just had the pleasure of reading. It appears to me to be
the one practical manual on the subject, far ahead of any other, and a
book which cannot fail to be of interest and use to anyone connected
with sheep."*

*Claud Fitzwalter, Koorah, Charleville, Qld.—"I find Sheep,
Farm and Station Management very useful, and it is really worth the
money. I can honestly say it is worth while for any man to get one
that is on the land amongst sheep and wool."*

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The Official Organ of the "Stud Beef Cattle
Breeders' Association of Australia."

Latest Stock Returns.

AUSTRALIA AND NEW ZEALAND.

	SHEEP.		CATTLE.		HORSES.	
	1919.	1920.	1919.	1920.	1919.	1920.
N. S. Wales ...	33,465,534	29,901,701*	2,852,047	2,854,877*	577,183	496,403*
Queensland ...	18,220,985	17,379,332	5,786,744	5,940,433	759,726	731,705
Victoria ...	15,778,902	14,422,745	1,596,544	1,631,120	523,788	513,500
S. Australia ...	6,625,184	6,014,565	342,768	349,562	269,255	264,901
W. Australia ...	7,183,747	6,697,951	943,847	880,644	180,094	174,919
Tasmania ...	1,841,924	1,781,425	218,234	214,442	41,221	39,452
N. Territory ...	47,520	—	420,362	638,431	26,674	26,231
Total Aust.	83,163,796	76,197,719	12,160,546	12,509,509	2,377,941	2,247,111
New Zealand ...	25,828,554	23,914,506	3,035,478	3,101,945	363,188	346,407
Argentina ...	—	44,850,000	—	27,050,000	—	8,323,815

N. S. Wales returns in each case are to 31st Dec., 1919, & 31st Dec., 1920
South Australia " " " " to 30th June, 1919, & 30th June, 1920
Q. & W.A. " " " " to 1st Jan., 1919, & 1st Jan., 1920
Victorian & Tas. " " " " to 1st Mar., 1919, & 1st Mar., 1920
N. Territory " " " " to 1st Jan., 1917, & 1st Jan., 1918
New Zealand—Sheep returns only are to 30th April, 1919, & 30th April, 1920.
Cattle and horses are to 31st Jan., 1919, and 31st Jan., 1920.

* Estimated.

Forthcoming Shows, 1921.

APRIL.

9-20—Hereford Herd Book Society,
at Hereford, G.B.
9-21—Toowoomba, Q.

MAY.

2-3—Cornamblie, N.S.W.
3-4—Charleville, Q.
0-11—Mitchell, Q.
0-11—Royal, Dublin, Ireland.
7-18—Blackall, Q.
7-18—Roma, Q.
8-19—Ipswich, Q.
18-19—Nyngan, N.S.W.
24-26—Pietersburg, S. Africa.
31-June 1—Bulawayo, S. Africa.
31-June 1-3—Dunedin Winter, N.Z.
31-June 2—Pretoria, S. Africa.
31-June 4—Bath & West at Bristol,
G.B.

JUNE.

8-10—Hereford and Worcester, at
Hereford, G.B.
9-11—Richmond Horse, G.B.
6-17—Gladstone, Q.
0-25—Olympia Horse, London, G.B.
21-24—Palmerston North National
Dairy, N.Z.
23-25—Rockhampton, Q.
28-July 2—English Royal at Derby.
30-July 2—Sydney Sheep.

JULY.

26-29—Highland at Stirling, Scotland, G.B.

AUGUST.

1-2—Melbourne Sheep.
3-4—Suffolk Sheep at Ipswich, G.B.
8-13—Brisbane National.
9-12—Royal Dublin Horse, Ireland.
10-11—Balmoral, Vic.
17-18—Hamilton, Vic.
23-25—Wagga, N.S.W.
30-31—Corowa, N.S.W.

SEPTEMBER.

4-15—Cootamundra, N.S.W.
5-17—Singleton, N.S.W.
9-24—Melbourne Royal.
28—Deniliquin, N.S.W.
28-29—Yarrawonga, Vic.

OCTOBER.

1-13—Bendigo, Vic.
1-12—Euroa, Vic.
12-13—Hamilton, Vic.

NOVEMBER.

15-16—Kyneton (Grand National), Vic.

Sydney Royal Show.

The Royal Easter Show, Sydney, opened on 21st March in delightful weather, and lasted nine days. Fifteen acres of land had been added to the ground since the previous year, and also a great number of new buildings. The first two days were confined to the judging, and only drew a small crowd, composed mainly of the exhibitors and country experts.

Besides the exhibits, a great number of ring events were contested, and the riding of some of the lady competitors was splendid. A very plucky exhibition was given on the Wednesday by Miss L. Wood, from Jamberoo, aged 13, who rode a fiery chestnut mare, which would have tested the strength of any man. Though the mare bolted most of the time, she managed to steer a straight course, and received great applause on completing the course.

The most interesting of the side shows was Goliath, reported to be the world's largest bullock, weighing about 3700 lbs., 19 hands high, and 14 ft. around the girth. He was in a tent, and run by a loud-voiced American, who must have made a fortune, as during the whole nine days there was a constant stream of people passing in and out.



CHAMPION DEVON BULL, CRAZELOWMAN FORESTER.
Exhibited by Mr. Hunter White.

The Shorthorns were the most popular of the cattle sections, both in the beef breeds and the dairying, and claimed more than half the entries. The champion bull provided a great contest between Mr. J. McMaster's Baritone and Mr. A. Hordern's Lindenow Duke of Derrimut 69th, the former just managing to gain the premier honours. The Herefords were also of a very high standard, though not so numerous as the Shorthorns. Twyford Hero, the property of the Exors. F. Reynolds, proved an easy winner of the championship.

On the Saturday and Monday the country sportsmen gave the show a rest, and tried their luck out at Randwick, which proved a very interesting two days, especially the brilliant victory of Mr. E. Lee Steere's Eurythmic in the Sydney Cup, which ought to prove that the argument that he can't carry weight is all a fallacy.

Sunday was devoted to having a look at the yearlings. In the morning there was a parade of 200 at Mr. Chisholm's stables, and in the afternoon Messrs. Inglis and Son paraded about 400. The sales commenced on 29th March, and continued at intervals for about ten days.

The Shorthorns.

BY "WAYBACK."

The Shorthorns at the show this year were a grand lot, about the best I have ever seen at the Sydney Royal. There wasn't a weak class in the lot. The judge was C. E. McDougall, one of the very best, and his decisions were well received. The first class to come into the ring was that of aged bulls. There were 9 entries, but only 6 paraded before the judge. Baritone and Lindenow Duke of Derrimut

69th fought their battle of last year over again, with the same result, though there were many round the ring who expected Baritone to be beaten. He is showing weakness in his hocks, but the judge placed him first, and he was afterwards awarded the championship for the third time, also the gold medal presented by the Shorthorn Society of Great Britain and Ireland for the best Shorthorn bull exhibited which is registered in, or eligible for registration in, the Shorthorn Herd Book of Australia. Lindenow Duke of Derrimut 69th was afterwards decorated with the reserve championship ribbon. Mr. S. E. Roberts gained third prize with his imported bull Notlaw Blazer 138270, a good fleshed red bull.

For bulls 3 years old and under 4 years there were ten entries, and eight came before the judge. First prize went to J. McMaster's Highton Duke of Derrimut, a very massive weighty bull; he has taken first prize every time he has been exhibited. Second went to P. Stacy's Milton's Kirklevington, a very taking bull, and third to Tippet Bros.' Zaretan Duke of Derrimut 24th, also a roan. E. Jones and Sons had two good imported bulls in this class, Adcote Butterfly Beau 140308 and Cropwell Cadet 141872, both roans. In the class for bulls 2 years old and under 3 years, there were 25 entries, and 12 paraded. First prize went to A. J. Webb's Lindenow Duke of Derrimut 95th, a very large light roan; second prize went to R. H. Dugdale's Merrimu Duke of Derrimut 10th, a very square, thick, low-set bull, also a light roan. There was very little between these two bulls. A very dark roan imported bull of A. Hordern's, Proud Lavender, was placed third. Messrs. Parsons and Robertson's red and white Chorister was highly commended and Dugdale and Creber's Emperor of Derrimut 17th was commended.

In the class for bulls 18 months old and under 2 years there were 25 entries, and 13 came into the ring. Sir Rupert Clarke was placed first with Bolinda Duke of Derrimut 437th, a dark roan shown in wonderful condition. Second prize went to A. J. Webb's Lindenow Duke of Derrimut 104th, a very pleasing roan, and third to Messrs. Lidgett Bros.' Matilda's Earl, also a roan. The judge highly commended two roan bulls belonging to H. L. Austin and A. J. Webb. In the next class, bulls 1 year old and under 18 months, there were 51 entries, 34 of which came into the ring, and a wonderfully good even lot they were. The judge, after thoroughly examining them, reduced them to 10, and finally awarded first prize to A. Hordern's Milton's Proud Broadhooks, by Lindenow Duke of Derrimut 69th; second prize went to A. J. Simpson's Clifton Duke of Derrimut 9th; third to A. J. Webb's Lindenow Duke of Derrimut 109th, while Tippet Bros.' Newlyn Duke of Derrimut 147th, a red and white, was highly commended. The judge commended three bulls bred and owned by Dalziel Bros., of New Zealand, and two of Henry Hay and Sons. These 10 young bulls were a grand lot.

For bull calves 6 months old and under 12 months, there were 36 entries, and 24 of them came before the judge, which he finally reduced to 10. First prize went to R. H. Dugdale's Merrimu Duke of Derrimut 15th; 2nd to Linsdell Bros.' Matilda's Duke 14th; 3rd to A. J. Simpson's Dundas Duke of Derrimut 10th, and J. McMaster got highly commended for Rarity. Tippet Bros. were also highly commended for two of their bulls. The special prize for best Shorthorn bull in the show under 2 years old went to Sir Rupert Clarke's Bolinda Duke of Derrimut 437th. The majority of the bulls were roans, and one couldn't help remarking what a few white bulls were shown.

The cows and heifers were a particularly good lot. There were 14 entries for cows 4 years old and over, and 8 came into the ring. H. L. Austin was awarded first and third for Grand Duchess of Clifton 2nd and Zaretan Duchess of Derrimut 18th, both good roans and typical Derrimuts. Second prize went to A. J. Webb's Lindenow Duchess of Derrimut 92nd, shown in the very best of condition. She is white, and a solid block of a cow. The first prize cow was afterwards awarded the reserve championship. T. A. Field's Newlyn May Rose 125th was highly commended.

In the class for cows 3 years old and under 4 years there were 10 entries, and 6 came before the judge, who had no difficulty in awarding the first prize, which fell to a white, Milton's Gainford Duchess, bred and exhibited by A. Hordern. This cow was afterwards awarded the championship.

Second prize went to Tippet Bros.' Newlyn May Rose 134th, a very handsome roan; third and highly commended to F. Firth's Lockslea Princess 2nd and T. A. Field's Matilda's Duchess 9th, both good coloured roans. In the class for cow or heifer 2 years old and under 3 years there were 11 entries, and 5 appeared in the ring. First went to John Dugdale's Duchess of Rosedale 9th; second to T. A. Field's Hambleton Lady Glengarry 3rd, and third to Dugdale and Creber's Empress of Derrimut 32nd; the two former were roans and the latter a white. This was the weakest of the Shorthorn classes.

For heifer 1 year old and under 2 years there were 31 entries, and 15 paraded. This was an exceptionally good class, and the judge had some difficulty in placing them. He finally awarded first prize to A. J. Webb's Lindenow Duchess of Derrimut 113th, second to A. J. Simpson's Clifton Summerton 9th, third to A. J. Webb's Lindenow Duchess of Derrimut 109th, while the same owner's Lindenow Duchess 110th, and L. M. and R. H. Dugdale's Merrimu Duchess of Derrimut 15th were highly commended. The judge commended five others, viz., A. Hordern's Milton's Nell Gwynne and Milton's Patricia, R. H. Dugdale's Merrimu Rose Duchess 3rd, T. A. Field's Warrana Duchess of Derrimut 1st, and Dalziel Bros.' Lady Armathwaite 5th.

In the class for heifer calf 6 months old and under 12 months there were 21 entries, and 11 came before the judge—a lot of little beauties. First prize went to A. J. Simpson's Clifton Matilda 6th, a perfect gem, and she was afterwards awarded the special prize for the best Shorthorn heifer under 2 years bred and owned by exhibitor; second prize went to W. Dugdale's Red Rose 61st, third to Linsdell Bros.' Glencoe Duchess of Derrimut 2nd. R. H. Dugdale was highly commended, and A. Hordern was commended with two of his exhibits, as also were Lidgett Bros., Cain Bros. and J. Dugdale. The Breeders' Plate attracted 7 entries, and nearly all of them came into the ring. A. J. Webb was placed first with three beautiful roans, and A. J. Simpson second. For the special prize group of Shorthorns 3 bulls not exceeding 18 months old bred by exhibitor, A. J. Simpson was placed first and Tippet Bros. second. There were 6 good groups to come before the judge. Special prize for 3 cows or heifers went to A. J. Webb's beautiful trio of roan heifers, beating H. L. Austin's three roan cows.

The Sales.

A great number of the cattle offered for sale were passed in, there being no bid for them. This applied to the bulls which were offered on Tuesday the 22nd, and to the heifers on the 23rd. However, there were some good sales effected. The top price for locally-bred bulls was 675 guineas for A. J. Simpson's second prize bull, Clifton Duke of Derrimut 9th, and he was bought by Messrs. Coughlan Bros., of Wagga Wagga. Messrs. Evan Jones and Sons, Wales, sold the imported bull Cropwell Cadet to Messrs. Capel Bros., Barraba, N.S.W., for 800 guineas. R. H. Dugdale got 410 guineas for his first prize bull calf, and 300 guineas for his second prize 2-year-old bull Merrimu Duke of Derrimut 10th, while Linsdell Bros. got 350 guineas for Matilda's Duke 14th, purchased for the Burnima Estate. Dugdale and Creber got 260 guineas for Emperor of Derrimut 17th. These were the only bulls to pass the 250 guinea mark, though possibly others fetched over that figure by private treaty. Highton Duke of Derrimut, purchased by J. McMaster for 1000 guineas three years ago, was offered, but didn't elicit a bid; the same fate befell Tippet Bros.' Zaretan Duke of Derrimut 24th. The cows and heifers met with very much the same fate as the bulls, the best of the sales of them being for John Dugdale's Duchess of Rosedale 9th, purchased by John Jones, of Bullagreen, for 370 guineas, while Messrs. L. M. and R. H. Dugdale got 350 guineas for their beautiful roan heifer Merrimu Duchess of Derrimut 15th, being purchased by Mackinnon Bros. These were the only two females to pass the 250-guinea mark. The best averages were as follows:—R. Dugdale, 2 bulls at 355 guineas; A. J. Simpson, 4 bulls at 265 guineas; Dugdale and Creber, 2 bulls at 220 guineas; Linsdell Bros., 3 bulls at 200 guineas; Tippet Bros., 4 bulls at 132½ guineas; A. J. Webb, 2 bulls at 155 guineas; Dalziel Bros., 3 bulls at 140 guineas; A. R. and F. Bowman, 2 bulls at 117½ guineas; Henry Hay and Son, 3 bulls at 100 guineas.

These were all that averaged 100 guineas and more. In heifers John Dugdale got an average of 212 guineas for 3, and R. H. Dugdale's average was 118 guineas for 5. There were a number of new breeders exhibiting for the first time, but they met with very scant success. Messrs. J. E. and H. C. Robertson and Roy Simson, who usually have good strings of bulls for sale, had nothing to offer this year. I noticed that there were very few buyers from Queensland present, and only a few cattle were purchased for that State. No doubt but a great many of the animals passed in were sold privately during the week, but it is very discouraging to breeders to feed up and prepare their stock for sale, and then not be able to sell them, or to sell them at a sacrifice.

THE HEREFORDS.

(By "Admirer.")

The Herefords this year were not quite up in point of numbers to those of last year, but for quality, breeding, and uniformity of type the younger classes more than held their own compared with last year's exhibits. Naturally the older bull classes are slack, as breeders very wisely take no risk in showing their valuable stud sires. The judge was a Victorian breeder, Mr. W. H. Yelland, and while opinions differed over a few of his decisions, yet on the whole, with a couple of exceptions, which will be referred to, he did his work satisfactorily.

In the aged bull class Mr. P. Reynolds was first with Shogun, a five-year-old bull bred by exhibitor. Mr. R. Taylor's Red Gauntlet, of Tasmania, was second. The next class, three-year-olds, brought out four very good bulls, but rather a contrast in type. Here I must cross swords with the judge, the general expression of breeders being strongly in favour of a Victorian bull, Royal Boy 4th, bred and exhibited by Mr. J. A. Beattie. This bull is a wonderful length, active in movement, beautifully marked, perfect hindquarter, being deep and square on top, and is sired by Broadward Eclipse (imp.). He was, however, placed second to the Tocal bull Twyford George, a deep, full-fleshed, soft-skinned animal, rather inclined to plainness about the head. A Tasmanian bull, exhibited by A. E. Grace, was placed third—a decent sort, low set type.

The two-year-olds numbered six, including last and this year's champion, Twyford Hero, from the Tocal stud, who stood right out. This typical and beautiful Hereford is a credit to his breeder, the late Frank Reynolds, and I would like to express here the regret we Hereford breeders have felt at his death. Considering this young bull has done a fair season, he is looking remarkably well, but not quite in the bloom of last year. A scalded hoof had no doubt detracted from his usual active movements as shown last year. Royalty, bred and exhibited by Mr. P. Reynolds, was second, and was no discredit to his owner.

The yearling class usually fetches out the draft of the season. This year they numbered twenty-three, and a fine lot they were, although there was a great variation in size. It is a pity that two classes are not made of this entry. The first and second prize bulls were April calvers against the third, four and fifth winners, calved September and October, a discrepancy of six months. Messrs. Penwick Bros.' Revelation, bred by the late Mr. Frank Reynolds, was first. He was shown in great bloom, and with his good skin and general appearance, was picked out the winner. Mr. Ray Reynolds' Commotion was a worthy second, and Mr. J. A. Beattie's Gisborne Victor, a very stylish youngster, showing quality and breeding, was placed third. Several good bulls that one would like to mention got up close to the winners, including a low-set, heavy-fleshed calf from Bundoran Estate, Victoria, and Lion Tamer, bred and exhibited by the Ryrie Estate, Micalago, a very nice even bull. Another bull that took the breeder's eye, but was out of condition, was Mr. C. H. Tindal's Gunyan Prince, got by Mansel Propeller, by the famous Starlight.

The bull calf class brought out eighteen—an even lot of youngsters, most of them being well cared for, and just showing signs of overdoing the job. To turn these highly-fed calves out to face the winter on ordinary grass land, which is usually done by their new owners, I question if they do justice to their breeder and purchaser. An older bull would have a much better chance. This was one of the classes where opinions differed around the ring. Tocal was first with Prince Richard, this youngster being full of quality and handled well, and with a little less white, one could hardly fault him. Mr. S. Reynolds was second with Diamond, a heavy, sturdy fellow, well grown, and plenty of even flesh. One was pleased to see a young breeder, Mr. R. K. White, get third place with Middy, a nice even calf.

In the females one was very disappointed at the older classes being so poorly filled. In the cow class there was only one entry,

that of Mr. R. K. White, Olive 8th, a beautiful little cow, full of quality, and with a typical head. She was bred by Mr. J. A. Beattie, Victoria.

The three-year-old class had only two entries, Tocal getting first and champion with Last Day 325th, a cow a little bit on the plain side for so worthy a stud. Mr. Kennedy was second with Waterlily 3rd. The next class only brought out five two-year-olds, and Tocal again scored first, Bundoran Estate second, and Mr. Kennedy third.

The yearling class was undoubtedly the pick of the females, and had some fine youngsters. One that stood right out was Mr. P. Reynolds' Minerva Lily 5th, by Eaton Conqueror (imp.). She was shown in great bloom, and reflects great credit upon the young studmaster, Mr. Ray Reynolds, to fetch her out as he did. There was a general consensus of opinion that this was one of the best heifers shown for years, and on coming out for the championship it was a surprise to many Hereford breeders that she did not get the coveted ribbon.

In the baby class, Mr. P. Reynolds was again first with Eaton Sunshine, his son Raymond's exhibit being second. For group one bull and three females Tocal was successful; the Hereford Society's prize for pair of bull calves was won by Mr. S. Reynolds; and a special prize for bull calved after 1st July, 1919, was won by Mr. J. A. Beattie's Gisborne Victor.

Mr. H. White, with a fine string, secured all the prizes in the Devon classes, while in Red Polleds Major Philip Charley was first in class for bulls any age, and the New South Wales Department of Agriculture first in class for cows any age.

CLYDESDALES.

F. S. Falkiner and Sons Limited were the most successful exhibitors of Clydesdales, and sent in an excellent team. There were 13 entries in the class for stallions four years and over, the first prize and championship going to Mr. J. Bunge's Scotland's Viceroy (imp.), whilst first and reserve championship went to Messrs. Falkiner's fine young stallion Widgiewa Knight, shown in the next class. There were 9 entries and good competition in the mare class 4 years and over, and the championship fell to F. S. Falkiner and Sons Limited's Lady Ida, now nearly 14 years old, reserve going to the same breeders for their Widgiewa Donna Roma. They won all the firsts for mares and fillies, also first and second in the Sires' Produce Sweepstakes.

Publications Received.

Review of the Frozen Meat Trade, 1920, from W. Weddel and Co. Limited.

Mysore Agricultural Calendar, 1921, from the Department of Agriculture, Mysore, India.

The Aberdeen-Angus Review, December 1920, from the Aberdeen-Angus Cattle Society, Scotland.

New Zealand Monthly Abstract of Statistics for February 1921, from the Government Statistician.

Victorian Year Book, 1919-20, by A. M. Laughton, Government Statist, from the Victorian Government Printer.

From Bailliere, Tindall and Cox., 8 Henrietta-street, Covent Garden, London, we have received a copy of their excellent *Atlas Model of the Ox* (price 3s. 6d.), showing 390 anatomical structures on superposed coloured plates with key.

We have received a copy of "*Australian and New Zealand Sheep-farming*" (second edition), by J. R. Macdonald (Pastoral Publishing Company, Auckland). The author was for many years a regular contributor to this paper, and in the book under review he presents a great deal of matter that will be of practical assistance to either the Australian or New Zealand sheepman, particularly the mutton and lamb raiser. The book can be obtained from Miss Macdonald, care of Messrs. Johnstone and Croker, solicitors, New Plymouth, N.Z.

The number of the "*Round Table*" for March 1921 is of especial interest. Of the non-Australian articles the most interesting is that on the Paris Conference, which analyses the causes of the disagreement between France and England over the German penal terms, and estimates the exact proportion of the indemnity which Germany may be reasonably expected to pay. There are other articles on Ireland and the Home Rule Act, on the Migration of the Races, with special relation to America, and on Diplomacy by Conference; also the usual special articles from the Dominions and India.

Sydney Royal Show Cattle Sales.

As already stated, the market was dull, and large numbers of good animals were passed in, or sold at considerable sacrifice. The Queensland demand was lacking, and fewer than usual were taken for the north. The top figure for locally-bred bulls was 675 guineas for Mr. A. J. Simpson's (Clifton, Vic.) fine bull Clifton Duke of Derrimut 9th, the buyers being Messrs. Coughlan Bros., of Wagga, N.S.W. Messrs. Evan Jones and Sons, Llandilo, Wales, sold the imported bull Cropwell Cadet to Messrs. Capel Bros., Barraba, for 800 guineas.

Herefords made up to 230 guineas for one of Mr. Sydney Reynolds' Duninald N.S.W. bulls, the buyer being Mr. F. C. K. Pitt, Tas. Following are particulars of the more important sales:—

DALGETY AND CO LIMITED.

Shorthorn Bulls.

On account of Messrs. Cain Bros., Madowla Park, Picola, Victoria:—

Collendina Duke of Derrimut 19th, Board of Works, Melbourne, 60 guineas.

On account of Messrs. Parsons and Robertson, Watch Hill, Beac, Victoria:—

Songster, — Bowman, Gulgong, 40 guineas; Wilgul Duke of Derrimut 9th, W. Hedges, 120 guineas; Chorister, J. G. Beddie, Forbes, 200 guineas; Choir Boy, W. T. Wharton, Queensland, 50 guineas; Troubadour, W. Hammond, Queensland, 400 guineas; Jessamine Duke 68th, T. Moxham, Bourke, 75 guineas.

On account of Mr. Wm. Dugdale, Clifton Vale, Myrning, Victoria:—

Oxford's 52nd Duke, H. E. A. and V. White, Belltrees, Scone, 190 guineas.

On account of Messrs. Dugdale and Creber, Tregothnan, Ballan, Victoria:—

Emperor of Derrimut 17th, by Clifton Duke of Derrimut 2nd, A. Lang, 260 guineas; Matilda's Royal Duke 3rd, A. Lang, 180 guineas.

On account of Messrs. Linsdell Bros., Glencoe, Greendale, Victoria:—

Glencoe Duke of Derrimut, Board of Works, Melbourne, 110 guineas; Matilda's Duke 13th, A. Waugh, Brewarrina, 140 guineas; Matilda's Duke 14th, Burnima Estate, Bombala, 350 guineas.

On account of Mr. Harry L. Austin, Eli Elwah, Hay:—

Eli Elwah Duke of Derrimut 21st, A. Lang, 130 guineas; Eli Elwah Duke of Derrimut 23rd, L. H. Corser, Maryville, Queensland, 90 guineas; Eli Elwah Duke of Derrimut 29th, Hon. T. Waddell, 45 guineas.

On account of Mr. James Carter, Rosedale, Moss Vale:—

Lord Derrimut 8th, — Walker, Trangie, 50 guineas; Kikiamah Duke of Derrimut 5th, — Walker, Trangie, 55 guineas; Duke of Charmingland 2nd, J. S. Love, Townsville, Queensland, 100 guineas; Kikiamah Duke of Derrimut 6th, H. C. Stevenson and Co., 160 guineas.

On account of Messrs. Andrew Kuleside and Sons, Uppingham, Koorawatha:—

Uppingham Duke of Connaught 2nd, J. Sternbeck, Q., 80 guineas.

On account of Mr. John Jones, Bullagreen, Armatree:—

Bullagreen Powysland Mariner 6th, A. Waugh, Brewarrina, 85 guineas; Bullagreen Powysland Mariner 5th, 80 guineas.

On account of Messrs. Tippet Bros., Newlyn Valley Stud Farm, Newlyn, Victoria:—

Newlyn Duke of Derrimut 147th, R. H. Dugdale, Victoria, 195 guineas; Newlyn Duke of Derrimut 149th, C. Baldwin, Durham Court, 120 guineas; Newlyn Duke of Derrimut 151st, J. Sternbeck, Queensland, 120 guineas; Newlyn Duke of Derrimut 152nd, A. E. Stein, Grenfell, 95 guineas.

On account of Mrs. I. Whitney, Coombing Park, Carcoar:—

Coombing Duke of Derrimut 17th, W. T. Wharton, North Queensland, 80 guineas.

On account of the Whitney Pastoral Company:—

Coombing Lord Charming 3rd, P. A. Chambers, Bourke, 40 guineas; Coombing Grand Duke of Derrimut 5th, P. A. Chambers, Bourke, 40 guineas.

On account of Mr. John Williamson, Lochinver, Carisbrook, Victoria:—

Prince of Lochinver 19th, E. L. Ryder, Boggabri, 65 guineas.

On account of Mr. John Dugdale, Rosehill, Myrning, Victoria:—
Cherry Duke of Derrimut 62nd, Coughlan Bros., Wagga, 60 guineas.

Shorthorn Heifers.

On account of Messrs. Cain Bros., Madowla Park, Picola, Victoria:—

Madowla's Azalea 39th, 100 guineas.

On account of John Dugdale, Rosehill, Myrning, Victoria:—

Duchess of Rosedale 9th, J. Jones, Bullagreen, 370 guineas; Duchess of Rosedale 12th, 140 guineas; Duchess of Rosedale 13th, 125 guineas.

On account of Messrs. Dugdale and Creber, Tregothnan, Ballan, Victoria:—

Empress of Derrimut 32nd, 100 guineas; Empress of Derrimut 39th, 75 guineas.

On account of Messrs. Lidgett Bros., Highton, Greendale, Victoria:—

Highton Duchess of Derrimut 9th, 100 guineas; Cherry Rose, 70 guineas.

On account of Messrs. Linsdell Bros., Glencoe, Greendale, Victoria:—

Matilda's Duchess 10th, 55 guineas; Matilda's Duchess 13th, 65 guineas; Glencoe Duchess of Derrimut 2nd, Messrs. Mackinnon Bros., 200 guineas.

On account of Frederick Firth, Lockslea, Warren:—
Lockslea Princess 2nd, 75 guineas.

On account of Harry L. Austin, Eli Elwah, Hay:—

Bolinda Duchess of Derrimut 46th, Coughlan Bros., Wagga, 130 guineas; Zaretan Duchess of Derrimut 18th, 100 guineas; Eli Elwah Oxford's Summerton 4th, Coughlan Bros., Wagga, 75 guineas.

On account of Jno. Williamson, Lochinver, Carisbrook, Victoria:—

Lady Weston of Lochinver 5th, 70 guineas.

On account of Executrix late H. F. C. Keats, Cobramunga:—

Matilda's Duchess of Cobramunga 4th, 50 guineas; Matilda's Duchess of Cobramunga 13th, 50 guineas.

Hereford Bulls.

On account of Percy Reynolds, Hobartville, Richmond, N.S.W.:—
Bold Baron, Messrs. Stewart and McMahon, Queensland, 100 guineas.

On account of Mr. John A. Beattie, Gisborne Park, Gisborne, Victoria:—

Royal Boy 4th, A. L. Faithfull, Goulburn, 170 guineas; Gisborne Victor, L. W. Guymer, Silver Spar, Queensland, 150 guineas.

On account of Mr. S. Reynolds, Duninald, Paterson:—

Caretaker, C. H. Tindal, Ramornie, 100 guineas; Diamond, C. H. McKeahnie, Queanbeyan, 225 guineas; Duke Rupert, F. C. K. Pitt, Tasmania, 75 guineas.

On account of Mr. C. H. Tindal, Ramornie Station, Copmanhurst:—

Gunyan Prince, J. L. Wilson, 150 guineas; Gunyan Count, A. W. Austin, Narrandera, 60 guineas.

On account of Mr. Robt. Taylor, Green Hill, Campbell Town, Tasmania:—

Redgauntlet 4th, A. R. Lawrie, Gloucester, 50 guineas.

Hereford Heifers.

On account of Mr. Percy Reynolds, Hobartville, Richmond, N.S.W.:—

Purity 19th, W. H. Friend, Wagga, 150 guineas; Miss Minerva 20th, W. H. Friend, Wagga, 100 guineas.

On account of Messrs. Fenwick Bros., Hazeldene, Miller's Forest:—

Maid of the Mist, F. C. K. Pitt, Tasmania, 50 guineas; Maid of the Hills, Exors. A. Ryrie, Micalago, 40 guineas.

PITT, SON AND BADGERY LIMITED, SYDNEY.

Shorthorn Bulls.

On account of Mr. A. J. Simpson, Clifton, Hamilton, Victoria:—

Clifton Duke of Derrimut 9th, roan, calved 4th November, 1919, sire Grand Duke of Clifton 6th (761), dam Bolinda Duchess of Derrimut 40th, by Bolinda Duke of Derrimut 208th (81), Coughlan Bros., Wagga Wagga, 675 guineas; Clifton Count 5th, Tubbo Estate Company, Whitton, 85 guineas; Dundas Duke of Derrimut 10th, Tubbo Estate Company, Whitton, 220 guineas; Dundas Duke of Derrimut 11th, James Carter, Rosedale, Moss Vale, 80 guineas.

On account of Mr. H. L. Austin, Elil Elwah, Hay:—

Elil Elwah Duke of Derrimut 25th, A. Bragg, Cootamundra, 50 guineas.

On account of Messrs. Dalziell Bros., Blair Athol, Hunterville, N.Z.:—

Athol Oxford Duke 2nd, F. G. White, Exeter, 160 guineas; Blair Athol Duke 145th, J. H. Doyle, Invermein, Scone, 110 guineas; Athol Beaulieu King 5th, Trustees late H. T. Edwards, Burnima, Bibbenluke, 150 guineas.

On account of Mr. L. Dalziell, Blair Athol, Hunterville, N.Z.:—

Shadow's Prince 7th, G. S. Mant, 60 guineas; Blair Athol Duke 142nd, Moxham Bros., Beemery, Bourke, 65 guineas; Athol Prince Derrimut 6th, P. O'Mullane, Burrun Junction, 45 guineas.

On account of Mr. A. J. Webb, Rathfarnham, Hillside, Victoria:—

Lindenow Duke of Derrimut 103rd, H. E. A. and V. White, Belltrees, Scone, 210 guineas; Lindenow Duke of Derrimut 105th, J. F. Vickery, Bective, Tamworth, 250 guineas; Lindenow Duke of Derrimut 110th, W. R. Scott, Moree, 180 guineas.

On account of Messrs. A. R. and F. Bowman, Grampian Hills, Bunnan:—

Grampian Lord Rattler 22nd, Melbourne and Metropolitan Farm, Werribee, Victoria, 150 guineas.

On account of Mr. R. H. Dugdale, Staughton Vale, Balliang, Victoria:—

Merrimu Duke of Derrimut 10th, Mackinnon Bros., Marida Yallock, Boorcan, Victoria, 300 guineas; Merrimu Duke of Derrimut 15th, W. O. Phillips, Goondiwindi, Q., 410 guineas.

On account of Mr. A. G. F. Munro, Weebollabolla, Moree:—

Gwydir Prince 2nd, E. A. Hardy, Iona, Coonamble, 75 guineas; Gwydir King, G. S. Mant, 80 guineas; Gooneeall, Bibbenluke Estate, 60 guineas.

On account of Canowie Pastoral Company Limited, Canowie, Hallett, S.A.:—

Canowie Flower Duke 17th, Melbourne and Metropolitan Farm, Werribee, Victoria, 80 guineas; Canowie Duke of Derrimut 64th, C. M. Spicer, Bedford Park, Gulargambone, 60 guineas; Canowie Duke of Alpine 1st, Tubbo Estate Co., Whitton, 110 guineas; Canowie Duke of Derrimut 79th, Hon. Thos. Waddell, Fort Bourke, Bourke, 75 guineas.

On account of Mr. T. A. Field, Warrana, Coonamble:—

Holmhurst Duke of Derrimut 3rd, Linsdell Bros., Glencoe, Greendale, Victoria, 150 guineas; Warrana Duke of Derrimut 2nd, P. Comisky, Withersfield, Q., 140 guineas; Warrana Duke of Derrimut 1st, P. Comisky, Withersfield, Q., 150 guineas.

On account of Mr. Charles Mackinnon, Derribong, Dandaloo:—

Duke of Derribong 55th, W. T. Wharton and Co., Queensland, 60 guineas.

On account of Mr. John McMaster, Binnia Downs, Coolah:—

Rose Crown, S. Bruce, Molong, 75 guineas; Minstrel, W. O. Phillips, Goondiwindi, 110 guineas.

On account of Mr. P. Stacy, Scott's Flat, via Singleton:—

Warrorean's Prince, McKenzie and Smith, Queensland, 65 guineas.

On account of Messrs. Henry Hay and Son, Collendina, Corowa:—

Collendina Duke of Derrimut 35th, S. W. Tindale, Crambo, via Denman, 85 guineas; Collendina Duke of Derrimut 38th, D. T. Bray, Queensland, 105 guineas; Collendina Duke of Derrimut 40th, Geo. Capel, Campo Santo, Barraba, 110 guineas.

On account of Trustees J. C. Hooke, Crooks Park, Dungog:—

Menindie Duke 63rd, Melbourne and Metropolitan Board of Works, 160 guineas; Menindie Duke 59th, W. H. Mackay, Anambah, 200 guineas; Menindie Duke 74th, Edward Bowman, Muswellbrook, 85 guineas; Menindie Duke 70th, Wilson and McDouall, Calliope, Gladstone, Q., 175 guineas; Menindie Duke 72nd, Melbourne and Metropolitan Board of Works, 85 guineas; Menindie Duke 84th, P. Comisky, Withersfield, Q., 75 guineas.

Shorthorn Heifers.

On account of Mr. A. J. Simpson, Clifton, Hamilton, Victoria:—

Clifton Cherry Queen 6th, W. R. Scott, Moree, 70 guineas.

On account of Messrs. Dalziell Bros., Blair Athol, Hunterville, N.Z.:—

Lady Armathwaite 5th, F. G. White, Exeter, 80 guineas; Lady Armathwaite 6th, T. Woods, Kinimo, Moree, 80 guineas; Blair Athol Duchess 149th, F. G. White, Exeter, 130 guineas.

On account of Mr. R. H. Dugdale, Staughton Vale, Balliang, Victoria:—

Clifton Matilda 3rd, S. J. Lee, Claremont, Molong, 100 guineas; Merrimu Duchess of Derrimut 18th, Mackinnon Bros., Marida

Yallock, Boorcan, Victoria, 160 guineas; Merrimu Duchess of Derrimut 16th, Trustees late H. T. Edwards, Burnima, Bibbenluke, 140 guineas; Merrimu Rose Duchess 3rd, Mr. Steele, Aramac, Q., 90 guineas; Merrimu Rose Duchess 4th, John Garnock and Sons, Bombala, 100 guineas.

On account of Messrs. L. M. and R. H. Dugdale, Staughton Vale, Balliang, Victoria:—

Merrimu Duchess of Derrimut 15th; Mackinnon Bros., Marida Yallock, Boorcan, Victoria, 350 guineas.

On account of Mr. John McMaster, Binnia Downs, Coolah:—

Golden Princess, H. Crothers, Queensland, 75 guineas.

BADGERY BROS. LIMITED.

Shorthorn Bulls.

On account of Mr. Anthony Horder, Milton Park, Bowral, N.S.W.:—

Milton's Lord Waterloo, W. A. Lang, Cooma, 55 guineas; Milton's Dundas, W. A. Lang, Cooma, 40 guineas; Milton's Barrington, T. Woods, Moree, 50 guineas.

On account of Mr. S. E. Roberts, Tiverton, Barwang, N.S.W.:—

Tiverton Notlaw Blazer, J. Ross, Harden, 75 guineas.

On account of Mr. J. MacGregor, Palmore Estate, Pakenham East, Victoria:—

Clunie, H. Cole, 60 guineas.

On account of Messrs. Evan Jones and Sons, Llandilo, Wales:—
Croppwell Cadet (imp.), sire Stragglethorpe (139599) from Croppwell Jennie 5th, Messrs. Capel Bros., Barraba, 800 guineas.

Hereford Bulls.

On account of Mr. W. M. Loder, Abbey Green, Singleton, N.S.W.:—

Prince Curley of Abbey Green, A. W. Austin, Narrandera, 50 guineas; Barometer of Abbey Green, O. Norton, Walcha, 47½ guineas.

On account of Mr. Percy Reynolds, Hobartville, Richmond, N.S.W.:—

Eaton Benefactor, C. H. McKeahnie, Queanbeyan, 155 guineas; Beaufort, L. W. Guymer, New England, 45 guineas; Eaton Count, O. Norton, Walcha, 57 guineas; Royalty, W. Padbury, West Australia, 200 guineas.

On account of Mr. R. A. Reynolds, Richmond, N.S.W.:—

Commotion, A. J. Hayes, Llangothlin, 140 guineas.

On account of Estate R. W. White, Harben Vale, Blandford, N.S.W.:—

Thumbs Up, W. Wright, 50 guineas.

On account of Mr. R. K. White, Glen Dhu, Blandford, N.S.W.:—

New State, G. Wright, 50 guineas.

On account of Mr. S. Reynolds, Duninald, Paterson, N.S.W.:—

Bellmetal, F. C. Pitt, Tasmania, 230 guineas; Sir Eaton, F. C. K. Pitt, Tasmania, 75 guineas.

On account of Messrs. Fenwick Bros., Miller's Forest, N.S.W.:—
Palmerston's Wonder, W. Dowling, Lue, 50 guineas.

Devon Bulls.

On account of Mr. Hunter White, Havilah, Mudgee Line, N.S.W.:—

Merson's Favourite, R. Williams, Kempsey, 50 guineas; Forester's Pilot, H. Nixon, Mt. George, 35 guineas; Forester's Director, A. Judge, Glen Innes, 35 guineas; Forester's Twin, H. Maunsell, 35 guineas; Forester's Lucky Dip, A. Judge, Glen Innes, 35 guineas.

On account of Mr. Ernest Merson, Havilah, Mudgee, N.S.W.:—
John Bull, T. J. Abbott, Gloucester, 55 guineas.

Cooma, N.S.W., Show.

The above fixture was held early in March, and proved a great success. The sheep exhibits, especially of Merinos, were good, but the cattle sections were not particularly well filled, although some excellent animals were shown. The principal prizewinners with Merinos were Mr. A. Ryall, Spring Plain, who won most of the championships, and Mr. O. O. Litchfield, Springwell. Mr. E. H. Litchfield, Woodstock, was very successful with fat sheep and cattle—Romneys and Durham cattle. The Exors. late A. Ryrie, Micalago, won the cup for the champion bull of the show, and all the prizes in the Hereford section.

Armidale, N.S.W., Show.

The 45th annual show of the Armidale and New England P., A. and H. Association took place the middle of last month, and was favoured with delightful weather. There was good competition in the beef cattle sections, and some excellent animals were shown. The championship for Durham bulls was won by Exors. C. C. Dangar, Gostwyck, the cow championship going to Mr. A. Baker, Laura. In Herefords Mr. S. Kelly won both championships, Mr. H. W. Curtis, Abbey Green, being also a successful exhibitor. The Abbey Green stud was likewise well represented in the Devon sections, Mr. Curtis scooping the pool. Mr. T. Forster, Abington, and Messrs. F. White and Sons, Saumarez, carried off all the prizes for Aberdeen-Angus cattle, the former taking both male and female championships. The Merino sheep exhibits ranged from indifferent to good, stock from the Gostwyck Estate coming under the latter heading. The Estate won the grand championship in both the ram and ewe classes. Messrs. Fletcher, of Kentucky, W. Sloman and J. Davidson also put in some good sheep.

Canterbury (N.Z.) Ram Fair.

At the annual ram fair held under the auspices of the Canterbury A. and P. Association, there was a larger entry than last year, and exceeded 5000. English Leicesters, as usual, provided the biggest section, but Romneys, Borders, and Corriedales were also forward in strong numbers. The rams were shown generally in good condition, the season being favourable to that end. The fair was anticipated with more than average interest on account of the fact, that wool and mutton prices are in the melting pot at present. The sale indicated that farmers were pinning their faith to the lamb future and to the dual purpose sheep possessing a fleece of medium fine wool. The Down breeds were in keen request, and improved on their top prices and averages of last year. Corriedales were in good demand, and found more buyers than last year. English Leicesters met with fair inquiry until demands were satisfied, but Border Leicesters were in strong request by fat lamb breeders. Few Lincolns, Romneys or half-breeds were sold. The range of prices for flock rams compared with last year's figures was as follows:—

	1920.		1921.	
	Gns.	Gns.	Gns.	Gns.
Lincolns	3¼ to 4	none sold		
Romneys	2½ to 14	1½ to 8		
Border Leicesters..	1¼ to 8¼	1½ to 7½		
English Leicesters	2¾ to 14	½ to 6		
Southdowns ..	1¼ to 5½	4¾ to 10		
Shropshires ..	2¼ to 7	2½ to 10		
Corriedales ..	4 to 30	1¼ to 30		
Halfbreeds ..	2¼ to 12¼	1½ to 6		
Suffolks	none sold	7 to 10		

The sale of stud rams went on much the same lines as the sale of flock rams. Three imported Border Leicester rams made 155½ gns., 145 gns. and 40 gns. The range of prices with those of last year was:—

	1920.		1921.	
	Gns.	Gns.	Gns.	Gns.
Corriedales ..	10 to 100	6 to 52½		
Shropshires ..	— to 12	— to 19		
Border Leicesters	8¼ to 145	9 to 155½		
Romneys ..	7½ to 56	7 to 10		
Southdowns ..	7½ to 10	8 to 20		
English Leicesters	6 to 85	5½ to 40		
Lincolns ..	6 to 8	— to 6		
Merinos ..	20 to 77½	12 to 13		

Knapdale, N.Z., Dispersal Sale.

The dispersal sale of the late Dr. Robert McNab's studs of Shorthorn cattle and Romney Marsh sheep was held on the estate on 9th March in the presence of a large gathering of buyers from all parts of New Zealand, as well as representatives from Australia. Bidding was brisk on the whole, and the auctioneers, Wright, Stephenson and Co. Limited,

and J. E. Watson and Co. Limited, report a satisfactory clearance.

The top price, 450 guineas, was made by the imported bull Cudham Pure Gold, and paid by Messrs. R. and J. Miller, of Whangarei. The best for females, 210 guineas, was given for Knapdale Josephine on behalf of Sir Anthony Hordern, Milton Park, N.S.W. Probably the largest buyer of cows and heifers was Mr. J. A. Johnstone, of Bushey Park, Palmerston. Amongst others, he bought the cow Knapdale Tea Rose, by Diamond Prince (imp.), for 150 guineas; the heifer Knapdale Ivy May 5th for 65 guineas; the imported cow Winsome, by Neil of Clunly, the red cow Knapdale Rose, by Diamond Prince; Knapdale Ivy May 3rd, with calf at foot by Knapdale Mac; a roan heifer calf by Knapdale Mac from Knapdale Tea Rose; and a white heifer called Knapdale Tea Rose 2nd, by Diamond Prince. Mr. W. O. McKellar, who was buying on behalf of Sir Anthony Hordern, bought, in addition to Knapdale Josephine, the imported cow Keir Josephine, by Edgar of Clunly 2nd, for 130 guineas; a white heifer by Diamond Prince called Knapdale Winsome for 70 guineas; and a heifer calf by Diamond Prince for 57 guineas. Mr. Leonard White, Rakaiia, paid 82 guineas for the roan cow Blandville Coax 36th, and 80 guineas for Marakakaho Plovers Gem. Messrs. J. McNicol and Co., Auckland, bought a roan heifer calf by Diamond Prince at 93 guineas, while a bull calf by the same sire sold to Mr. Donald Macdonald for 50 guineas. Diamond Prince himself was ultimately bought by Mr. A. Campbell, Wyndham, for 85 guineas.

The Romney sheep realised from 18½ guineas down to 5½ guineas for rams, 5 guineas to 2 guineas for ram lambs, 3¼ guineas to 2 guineas for the one, two and three shear ewes. The ewe lambs brought from 2¼ guineas down to 1½ guineas.

Mount Violet, Vic., Dispersal Sale.

This property, in the estate of the late John Cumming, jun., has been acquired by the Repatriation Board, and the Merino flock is to be sold at the homestead the second week in May. Mount Violet has been in the Cumming family ever since it was taken up from the Crown in the sixties, and formed a group with Terinallum, Mount Fyans and Stony Point properties, held by the four sons of John Cumming, of Aberdeen. His son, John Cumming, jun., late of Terinallum, was one of the original breeders of pure Merino sheep in the district, he having introduced them from the continent. He and his brothers were keen Merino men, and in the seventies and early eighties swept the board at the sheep shows then held at Melbourne, Ballarat and Skipton. They acquired the famous Sir Thomas ram (which gives its name to the Belle Vue flock), and the Mount Violet sheep have been kept to the same strain to the present time.

Altogether 9000 pure-bred Merinos will come under the hammer on 12th May, nearly all being breeding ewes. The dispersal means the breaking up of yet another of the fine woolled flocks of Australia, which, from a national point of view, is to be greatly regretted. Included in the offering will be 500 studs, and breeders will have a good selection to choose from.

Culling Stud Sheep in New Zealand.

The question of culling stud sheep was discussed at the annual meeting of the New Zealand Sheepbreeders' Association (South Island), following a letter sent by Mr. J. A. Johnstone, of Otago. The letter stated that the South Island had recently been visited by two of the largest buyers of Corriedale sheep in South America, Messrs. C. L. Donaldson and G. S. Yonge. These men represented no fewer than 30 different estancias, and they made purchases of over 800 Corriedale sheep from most of the leading studs in Canterbury and Otago. The object of the letter was to bring before the council the independent statement of both men with respect to the Corriedale flocks of the Dominion. They gave it as their opinion that in no case did the Corriedale sheepbreeders of New Zealand cull their flocks heavily enough, and that if breeders wished to maintain, and if possible improve, the character and quality of their sheep they should be far

more severe in the culling of the flocks. They said that South American estancieros wanted New Zealand Corriedale sheep if New Zealand could give them a high standard of quality. The writer considered that the council should stiffen the conditions of entry. In his opinion the remarks of the visitors applied not only to Corriedales, but to every breed of sheep bred in New Zealand. He had purchased numbers of Corriedale sheep registered in the Flock Book, and on taking delivery he had had to cull fully 50 per cent. as not up to standard and type. An owner of sheep had told him that it paid him best not to cull heavily. Mr. Johnstone made the suggestion that if inspectors were instructed to err rather on the side of strictness than on the side of leniency, as seemed to be the case, much could be accomplished in raising the standard of flocks.

The chairman (Sir George Clifford) said that it would be a good idea if the association could arrange for periodical inspection of flocks. He would be glad if a scheme could be set up on the lines he suggested. It should be seen that the sheep registered in the flock book were fit for registration.

Mr. J. Deans said that probably certain owners would be willing to pay the expenses of inspectors if the owners were given a certificate from the association to the effect that the sheep were of satisfactory standard, and were representative and typical of the flocks. If the matter was left on a purely voluntary basis it would no doubt meet with the approval of breeders. He moved that it be a recommendation that voluntary inspections be invited, the fees to be fixed by the Council.

This was seconded by Mr. Rutherford, and carried.

It was also decided that the secretary should be instructed to circularise breeders on the lines indicated.

Early Cattle History.

The following biographical sketch of a very old settler—from the diary of the late Chas. Reynolds, father of the late Frank Reynolds, of Tocal, N.S.W.—is of interest. As an instance of energy and enterprise having failed in the long run to secure its just reward, it would be worthy of perusal, even if it were destitute of many interesting incidents, which the reader will find it contains, while the unpretentious manner in which it is related, rather adds to, than detracts from the value of the sketch.

The narrative, written in 1879, runs as follows:—

In the town of Alameda on the Bay of San Francisco there lives an old man in his eightieth year, who many years ago was well known to the Australian colonies. George Hobbler left England in the latter part of 1825, and landed in Hobart early in 1826, with his wife and two children, bringing with them a pure Devon cow, Fairmaid, bred by Mrs. Hobbler's brother, Mr. George Turner, of Barton, and a few sheep. Many of the pure Devons of the present day are descended from this cow.

Mr. Hobbler remained in Van Diemen's Land until 1836, when he removed to Sydney, whither he took a considerable amount of capital that he had accumulated by energy and good management, a few choice Devons, descendants of the imported cow Fairmaid, and the Hereford stud bull Trojan, and some pure cows.

On his arrival in Sydney he lost no time in exploring the country for squatting, and took up the Wee Wah Station on the Liverpool Plains, then the "niver niver" country, so called because to all questions the blacks, who knew no English, answered "niver niver," not "never never," which it has been modernised into. In the terrible depression of 1841 Mr. Hobbler became a ruined man, and his residence, Aberglasslyh, near Maitland, with his station on the Barwon and Namoi, passed out of his hands. He had given much attention to the breeding of Hereford and Devon cattle, and several pure herds in New South Wales are raised on the foundation he laid. Three hundred of his best cattle were sold by the trustees of his estate to Reynolds and Parnell for £60. One mare he bred was taken to Port Curtis, and fell into the hands of D. C. Simpson, of the Loddon, and from this mare, Moss Rose, a great many winners have descended. I doubt if any one mare in the colonies has produced so many.

Mr. Hobbler next moved with his family to Mummel, near Goulburn, and from here he went down the Murrumbidgee, and took up Nap Nap and Paika Stations, then 60 miles below the lowest station on the Murrumbidgee, and in a part of the country very thickly populated with blacks, but by judicious management all went smoothly with them, and Mrs. Hobbler and family

of six sons and daughters were not murdered as many predicted they would be. After four years of occupation of these runs, Mr. Hobbler was again ruined by an act of the Governor-in-Council in Sydney, decreeing that all unoccupied country required for squatting should have a full description of it advertised in the Government "Gazette" for three months, after which tenders might be put in, the highest of which secured each particular run. The question then arose whether Mr. Hobbler and many others who had taken up the country there were in legal occupation of their runs. As there was no commissioner for that district, it was decided that all these runholders should be considered in unlawful possession, and that all this country should be tendered for as new runs. Mr. Hobbler sold his stock at a very low price and left for California with his family, having been ten years in Tasmania and fifteen in New South Wales and Port Phillip.

In California he was one of the first to direct attention to the value of sheep farming, in which he was engaged until two years ago, when the drought, which was so terribly felt in the colonies as well as in California, reduced his stock to 700, which he sold for 10d. a head, and ceased to be a stockholder.

How Stock Prices have Appreciated.

The British "Live Stock Journal" gives the following interesting table of how stock prices have appreciated since 1914:—

AVERAGE VALUES IN 1914 AND 1919-20.

Breed.	Cattle.		
	Average Value, 1914.	Average Value, 1919.	Average Value, 1920.
Shorthorns	£38 9 7	£224 0 10	£780 14 3
Herefords	37 7 0	206 10 0	473 16 0*
Devons	35 3 2	59 12 0	110 16 5
Sussex	33 5 6	45 13 4	171 0 0
Red Polls	40 0 0	117 12 3	200 17 6
Lincoln Reds	30 3 5	61 19 11	85 0 0
South Devons	26 10 3	73 13 0	109 3 3
Jerseys	37 11 6	172 6 4	83 8 0
Guernseys	30 0 0	137 17 2	92 14 10
Aberdeen Angus	44 13 2	108 12 4	143 17 6
Ayrshires	35 0 0	104 14 7	239 14 3
Holsteins	39 5 2	141 1 8	426 7 8
Sheep.			
Border Leicesters	£39 8 6	£65 4 0	£230 0 0
Southdowns	11 9 8	14 0 0	22 18 2
Shropshires	19 6 0	50 14 0	40 3 0
Suffolks	17 0 2	16 0 10	28 17 6
Leicesters	17 0 0	40 8 6	55 0 0
Lincolns	20 5 3	33 14 3	41 7 1
Romneys	11 0 9	249 15 9	33 8 3

* At the Aldersend sale, where 39 cows with 34 calves averaged £980 18s. apiece.

HIGHEST INDIVIDUAL PRICES IN 1919-20.

	Cattle.	
	1919.	1920.
	Gs.	Gs.
Hereford	9,000	5,500
Beef Shorthorn	4,200	6,600
Friesian	4,500	4,500
Aberdeen-Angus	2,800	3,000
Red Poll	1,200	480
Sussex	750	550
South Devon	310	400
Devon	350	235
Ayrshire	550	1,780
Sheep.		
Lincoln Longwool	1,500	1,000
Suffolk	350	380
Romney Marsh	1,000	300
Leicester	70	107
Border Leicester	600	1,100
Shropshire	120	100
Southdown	180	210
Horses.		
Shire	2,610	4,600
Suffolk	1,200	500
Percheron	1,600	720
Clydesdale	5,145	1,622
Thoroughbred (yearling)	11,500	14,500
Hackney	1,350	900
Hackney Pony	250	2,300

The Hereford in South Africa.

A perusal of the report of the third annual general meeting of the Hereford Breeders' Society of South Africa leaves the impression that the White Faces are making great headway in that country, and that the society, realising they have a good thing, are bent on making the most of it. It is paving the way for a publicity campaign, a part of which will be to invite the British breed society to send an official to South Africa. It is proposed to request Mr. Britten, the secretary of the parent society, to visit the country and co-operate with the local body in carrying out a vigorous propaganda. It is also proposed to invite him to judge at the leading shows while in South Africa.

In connection with a proposal by the Government with a view to developing the beef industry, the council have suggested:—(1) The judicious expenditure of £20,000 on bulls for distribution among breeders; (2) the establishing of a cattle division of the Department of Agriculture; and (3) that a Veterinary Department, solely responsible to the Minister, be constituted to stamp out diseases which threaten to become endemic.

It is interesting to note here that at the annual meeting of the Australian Hereford Society in Sydney last month it was set out in the presidential report that "Hereford breeders recently had the opportunity of meeting Mr. A. M. Miller and Mr. E. W. Evans, two South African breeders of Herefords, who came here in search of stock. I understand from the secretary that these gentlemen have expressed themselves as disappointed that our pedigrees do not conform to the English herd book standard of registration. Mr. Miller had suggested that we should remodel our herd book so that it would convey information as to which of our cattle were eligible for the English herd book, and which were not. Mr. Miller has suggested that we should invite the secretary of the English herd book to come to Australia after he has visited South Africa, so that he might become personally acquainted with the quality of our cattle, and the method of our registration.

"If it could be arranged that Mr. Britten be here in August, the Royal National Association of Queensland might be glad to have him act as judge at their show in August."

The Australian Longwool Sheepbreeders' Association.

The usual Council meeting of the Australian Longwool Sheepbreeders' Association was held in Sydney last month. There was a large attendance of councillors, and the chair was occupied by the president, Mr. G. F. Doyle.

Applications were considered for the registration of eighteen new flocks, and forty-four vendors' certificates were passed for registration. Numerous letters of an important character were considered and dealt with.

The secretary reported that the monetary prizes and grand champion ribbons awarded by the association to the Royal Agricultural Society's Show at Perth, W.A., had been very much appreciated, and that the local members of the association in that State had decided to meet periodically to discuss matters of interest to them as breeders of Longwool sheep, and to assist the Central Council in expanding the operations of the association in Western Australia.

A letter was received from the combined committee of the New South Wales Sheepbreeders' Association and the Royal Agricultural Society of New South Wales asking for the co-operation of the Council in a special effort to make the Sydney Show a success in future. It was decided to send out a circular letter to all the members urging them to send to the show as many representative stud sheep exhibits as possible, and also asking them to assist the New South Wales Sheepbreeders' Association by becoming members of that organisation.

The secretary reported that he was now engaged upon the compilation of the twelfth volume of the flock book. A discussion arose as to the necessity of exercising greater stringency in the admission of illustrations that were not really good. It was pointed out that the Council had the right of veto in the case of any photos which did not come up to the standard.

The president suggested that it would be an excellent idea to introduce a scheme of flock competitions in connection with the flocks registered with the association, but it was decided to defer the matter for future consideration.

Australian Sheepbreeders' Association.

Dates of Show and Prize Schedule.

At a largely attended meeting of the Australian Sheepbreeders' Association, held in Melbourne last month, the president, Mr. Edwin Currie, being in the chair, it was unanimously decided that the annual show be held this year as usual at Messrs. Goldsbrough, Mort and Co.'s warehouse, Bourke-street, Melbourne on 1st and 2nd August. A schedule of the prizes for fine and strong wool Merinos (including Small Holders' Section), Lincolns, Border and English Leicesters, Shropshires, Southdowns, Romney Marsh and Corriedales, was adopted, similar to last year's schedule. Classes were added for medium wool Merino sheep (twelve classes as in fine and strong wool sections) and Suffolks, and it was decided to include competitive classes for Polwarths. The conditions of entry in the Small Holders' Section were amended to enable breeders with not more than 3000 sheep to exhibit in lieu of holders of not more than 3000 acres as in the past.

Colonel C. E. Merritt (president) and Mr. H. Schwiager (secretary) of the Royal Agricultural Society of Victoria, attended the meeting to discuss with members a suggestion emanating from that society that Australian Sheepbreeders' Association shows be held at their show grounds. A vote was taken of the members present to test the feeling of the meeting, and the vote was unanimous against removal.

The Australian Corriedale Sheepbreeders' Association.

A Council meeting of the Australian Corriedale Sheepbreeders' Association was held in Sydney last month. The president, Mr. D. Macfarlane, occupied the chair.

Numerous applications for the registration of new flocks were considered, and letters of an important character were read and dealt with.

The secretary reported that the bulk of the registered flocks in New South Wales and all the flocks in Tasmania had been inspected and tattooed. The Victorian flocks would be inspected in April. As soon as the inspections were all completed the flock book would be compiled and issued to the members.

The President placed before the Council a new form of annual return, which he considered would be a great improvement upon the form now in use. It was decided to adopt the new form, and the secretary was instructed to issue them in future.

Reference was made to the decision arrived at during the last annual meeting to have all Corriedale sheep sold on the show ground during the Sydney Sheep Show.

Reference was also made to the personal effort made by the president to induce all the members of the association to send in exhibits of their best representative stud sheep to the Sydney Sheep Show this year.

The president referred to the necessity of exercising the greatest possible care in supervising the export of Corriedale sheep to foreign and overseas countries. It was absolutely essential that the export certificates of the association should only be issued for sheep that were undoubtedly true to type, and that would maintain the reputation of the association.

It was decided to recommend to the committee of the Sydney Sheep Show certain well-known Corriedale breeders as eligible judges for that section of this year's show.

The Stud Beef Cattle Breeders' Association of Australia.

The fourth annual general meeting of the members of the Stud Beef Cattle Breeders' Association of Australia took place at the Country Club, Sydney, on Wednesday evening, 23rd ultimo. There was an excellent attendance of members, and the meeting was presided over by the president, Mr. Arthur Bowman. Interstate members were well represented, and there was an atmosphere of keen enthusiasm in the operations of the association. Many matters of vital importance to the members were considered, and it was decided to carry on vigorously the important work of the association. Additional members were enrolled.

The following report was read by the secretary, Mr. William Spier, and adopted:—

As you will remember your Council reported last year the cessation of all inspection, owing to the severe drought that was

devastating the herds and flocks of New South Wales and other States. It was found impracticable to inspect the cattle under such adverse conditions, and the only reasonable course to take was to suspend all inspection work until matters improved.

The betterment that took place in the season some months ago removed the necessity of continuing that suspension, and operations were again started. The association's inspectors were sent out to the various districts to recommence their work, and so far 1744 cattle have been inspected for admission into the Foundation Stock Register.

The value and necessity of this register are recognised by all who are desirous of gradually building up the character and reputation of their cattle. Applications for admission into the register are now coming in from all parts of the Commonwealth, and the association's inspectors will be actively engaged in inspecting and branding the cattle for some months to come. The inspection of the cattle in Tasmania is now being carried out.

Propaganda work is still being carried on, and your Council has to report that notwithstanding the withdrawal of some of the members owing to the dispersal of their herds as the result of the long-continued drought, the membership list is steadily expanding. Your Council is keeping well in touch with the members resident in the other States, and the Federal character of the membership of the association is being fully maintained.

At various times during the past four years many of the Shorthorn breeders connected with the association have strongly urged your Council to compile its own Shorthorn Herd Book. In view, however, of the fact that the first volume of the Shorthorn Herd Book of Australia had just been published by the Royal Agricultural Society of Victoria, it was considered advisable to defer the compilation of another Shorthorn Herd Book. It was also decided that an effort should be made to acquire the copyright of the existing book, and conferences of Shorthorn breeders took place with that object in view. Subsequently a meeting of Shorthorn breeders was held, at which it was resolved to form the Shorthorn Society of Australia, one of the objects of which is to obtain control of the Shorthorn Herd Book of Australia.

With regard to herd books for the other beef breeds connected with the association, the compilation and publication of these will take place as soon as sufficient entries have been received. Members are therefore urged to send in their entries without further delay.

Quite recently Australia has been visited by two prominent cattle breeders holding official status in connection with the cattle-breeding organisations of South Africa. These gentlemen, Messrs. A. M. Miller and E. W. Evans, have strongly urged this association to emphasise with its members the necessity of preserving the pedigrees of their cattle, and establishing one standard herd book for each breed for the whole of Australia. South Africa is looking for beef cattle of the proper type, but will only purchase those that are eligible for entry in herd books of the same standard as those published by the cattle societies of Great Britain.

The following office-bearers were then elected for the ensuing year:—

President: Mr. Arthur Bowman. Vice-presidents: Mr. R. R. Dangar (New South Wales), Mr. G. B. Waller (New South Wales), Mr. A. J. Simpson (Victoria), Mr. J. H. Thirkell (Victoria), Mr. C. H. Angas (South Australia), Mr. C. B. Grubb (Tasmania). Council: Representing Shorthorn breeders for New South Wales, Messrs. D. M. Bell, J. Carter, O. E. Friend, G. F. Doyle, H. A. Hay, N. J. Holmes, J. Jones, W. A. Lang, H. C. Taylor, and H. H. White; for Victoria, Messrs. W. N. Cain, L. Dugdale, J. MacGregor; for West Australia, Mr. A. W. Edgar; for Tasmania, Messrs. R. C. Field and F. C. K. Pitt. Representing Hereford breeders for New South Wales, Messrs. A. L. Harris, K. H. M. Kennedy, C. H. McKeahnie, and H. M. Mair; for Queensland, Mr. L. B. Tomes. Representing Devon breeders for New South Wales, Mr. S. R. Lawrence. Representing other beef breeders for New South Wales, Mr. F. D. McMaster; for Tasmania, Mr. G. E. Greene. Hon. treasurer: Mr. C. E. H. Maitland.

New Zealand Sheepbreeders' Association.

At the annual meeting of the New Zealand Sheepbreeders' Association (South Island) the annual report presented by the chairman (Sir George Clifford) stated that:—

Volume 16 of the Flock Book had been published, containing the flocks of the following breeds:—Lincoln, 21; English Leicester, 116; Border Leicester, 181; Romney Marsh, 113; Southdown, 44; Shropshire, 20; Merino, 31; Ryeland, 7; Suffolk, 3; Corriedale, 70; Halfbred, 12; total, 618. The following new flocks had been admitted during the year:—Lincoln, 4; English Leicester, 13; Border Leicester, 13; Romney Marsh, 12; Southdown, 2; Merino, 4;

Ryeland, 1; Suffolk, 2; Corriedale, 43; Halfbred, 8; total, 102. Flocks were dispersed or withdrawn as follows:—Lincoln, 2; English Leicester, 4; Border Leicester, 33; Romney Marsh, 16; Southdown, 3; Shropshire, 3; Ryeland, 1; Corriedale, 6; total, 68. Twenty silver shields were offered for the best 4-tooth ram and 2-tooth ewe in the various breeds, to be the property of breeders whose flocks are registered in the New Zealand Flock Book (South Island). The following were the winners of the shields:—Christchurch Show: Merino ram (fine combing), James Stevenson; Merino ewe (fine combing), Sir George Clifford; Merino ram (strong combing), D. W. Westera; Merino ewe (strong combing), N. Rutherford; English Leicester ram, R. and J. Reid; English Leicester ewe, R. and J. Reid; Lincoln ram, New Zealand and Australian Land Company Limited; Lincoln ewe, T. Dowling; Southdown ram, Canterbury Agricultural College; Southdown ewe, A. W. Adams; Shropshire ram, R. Parry; Shropshire ewe, R. Parry; Corriedale ram, New Zealand and Australian Land Company Limited; Corriedale ewe, New Zealand and Australian Land Co. Limited; Halfbred ram, Sir George Clifford; Halfbred ewe, Sir George Clifford. Dunedin Show: Border Leicester ram, T. S. Little; Romney Marsh ewe, W. G. Ladbroke. Invercargill Show: Romney Marsh ram, —; Border Leicester ewe, R. J. Anderson. The balance-sheet showed a debit balance of £66 2s 9d., and in the capital account the assets exceeded the liabilities by £730 11s. 11d.

The president explained that the debit balance was due, among other causes, to the enhanced cost of stationery and printing, together with an extension of the flock book. At present the flock book was supplied at a cost of 3s., and the annual subscription was 10s. The Council recommended that the subscription should be raised to £1, and the flock book supplied free. This was agreed to.

Sir Geo. Clifford was re-elected president and Mr. Robert Reid vice-president.

New Zealand Corriedale Sheepbreeders' Association.

The annual meeting of the New Zealand Corriedale Sheepbreeders' Association was held at Christchurch on 19th March, Mr. C. H. Ensor, president, being in the chair.

The president congratulated members on the progress made by the Corriedale breed. Buyers came from far afield for Corriedales, a result due to the work of the association, supported by the high standard set by breeders. Their breed had been cried down, but the biggest consignment of stud sheep that ever left this country were Corriedales—a consignment of about £34,000 in value, which went in one lot recently to South America. The chairman mentioned the fact that 43 new Corriedale flocks had been registered.

Mr. W. O. McKellar brought up the question of a Corriedale flock being accepted for registration in the flock book without the certificate of the vendor of the foundation ewes. As an association they had a right to object to that. These ewes were the pick of a station's annual draft purchased six or seven years ago, for which the vendors refused to give a certificate. The buyer, however, got them through, which meant that a matter of 1500 ewes or more obtained registration quite improperly. He thought if this sort of thing were allowed to continue, the Corriedale breeders should establish a flock book of their own.

The chairman mentioned that before being accepted, sheep should be bred for fifteen years, and the certificate should show that.

After discussion, it was resolved that a deputation wait on the New Zealand Breeders' Association with reference to the registration of this flock without the production of a certificate from the vendors of the foundation ewes.

The following officers were elected:—President, Mr. G. D. Greenwood; vice-presidents, Messrs. C. H. Ensor and Hugh Ensor; committee, Messrs. W. Mackintosh, H. T. Little, N. Campbell, Colonel Chaffey, W. O. McKellar, C. N. Orbell, O. T. Evans, and Robt. Reid.

U.K. Revenue and Expenditure.

The following figures, showing the revenue and expenditure of the United Kingdom for 1914-15 and the past four years are of considerable interest:—

Year.	Revenue.	Expenditure.
1914-15	£270,332,000	£1,132,654,000
1917-18	707,235,000	2,696,221,600
1918-19	889,021,000	2,579,301,000
1919-20	1,339,570,000	1,665,773,000
1920-21	1,425,984,000	1,195,427,000

British Live Stock Interests.

LONDON, 3rd March, 1921.

Live Stock Statistics.

The complete figures of live stock in the United Kingdom are now available, the statistics being those just issued by the Ministry of Agriculture of the census returns taken last June. The position is shown in the following table.—

Year.	Dairy Cattle.	Other Cattle.	Total Cattle.	Sheep.	Pigs.
			Thousands.		
1914 ..	4,577	7,568	12,145	27,886	3,940
1915 ..	4,477	7,655	12,132	28,198	3,784
1916 ..	4,482	7,931	12,413	28,771	3,605
1917 ..	4,499	7,847	12,346	27,788	2,999
1918 ..	4,587	7,687	12,274	26,981	2,799
1919 ..	4,571	7,893	12,454	25,048	2,914
1920 ..	4,368	7,364	11,732	23,332	3,103

All countries had in the aggregate less cattle in 1920, though the decline in Scotland was only 64,000 (about 5 per cent.), and in Ireland 10,000, and is practically negligible, the main decline being in England and Wales.

The position as regards sheep is more disquieting. The total number in England and Wales was returned at 13,383,000, a reduction of 1,740,000 as compared with a year earlier, which was the smallest number ever recorded up to that date. As compared with the ten years immediately before the war, sheep have been reduced by 28½ per cent. in number, and the loss in the case of breeding ewes is rather greater, viz., 29½ per cent. In 1920 there was no county in England in which a decrease did not occur. So far as Scotland is concerned the number was only reduced by 49,000, less than 1 per cent., while in Ireland the number increased by 76,000.

Unlike other live stock, more pigs were being kept in England in 1920 than in 1919, the addition being 195,000, or about 11 per cent., breeding sows showing the greatest relative increase (about 15½ per cent.). Scotland shows a loss of 9000 (7 per cent.), while in Ireland the numbers were practically stationary.

Spring Shows and Sales.

Last month witnessed the commencement of the series of annual spring shows and sales of stock throughout the country, and below I give short reports of the leading events:—

Perth Angus Show and Sale.—On the 7th February Messrs. Macdonald, Fraser and Co. commenced their three days' sale of Aberdeen-Angus cattle at Perth. Few cattle were bought for England, but several aristocratic bulls were secured for Argentina, United States, South Africa, and Alberta. The total amount realised at the sales was £53,638. The top price was 3000 guineas, for a first prize bull from Bleaton, Mr. McBeth, of Dunira being the purchaser.

Perth Shorthorn Show and Sale.—The following week Messrs. Macdonald, Fraser and Co. commenced a three days' sale of Shorthorns at Perth, exporters being strongly represented round the ring. The total number of animals which changed hands was 694 head, at an average of £151 11s. 3d., 31 cows averaged £89 15s. 2d., 530 bulls £182 5s. 11d., 33 two-year-old heifers £81 14s. 2d., and 100 yearling heifers £72 10s. 6d.

Aberdeen "Doddy" Sale.—Following this sale a two days' event was held at Aberdeen, when Angus cattle were up for auction. The stock from Mr. Chas. Penny's Skillymarno herd not only secured the supreme championship, but also won all the other cups, medals, and specials, and in each instance, with the exception of the group prize, his stock stood reserve. For 400 head sold the total amount realised was £25,734 9s., 342 bulls averaged £65 13s. 9d., 9 cows £68 16s. 8d., and 49 yearling heifers £51 1s. 8d.

Hereford Bull Show and Sale.—The Hereford Herd Book Society each year organises bull shows and sales at Hereford in February, March, and April. There was an entry of over 150 bulls at last month's event. Captain R. T. Hinckes' Banner Guard, leader of the early two-year-old class, weighed 18½ cwt. At the auction 73 bulls sold for £10,091 1s., an average of £138 4s. apiece. The top price was 700 guineas, which was given by Sir W. J. Hicks for Mr. W. Smith's Leon Twin.

Haywards Heath Sussex Cattle Show and Sale.—Messrs. T. Bannister and Co.'s annual event brought forth a good representative entry. The champion bull was Mr. G. R. Bennett's Ridge Geoffrey 2nd. This animal made the top price of the sale, 300 guineas, and no less than twelve animals fetched sums ranging between 110 and 300 guineas.

Aberdeen Shorthorn Sale.—A two days' event brought forth 412 head for sale, the best of which were purchased for the Argentine. The total sum realised was £37,336 19s., the average apiece being £90 12s. 5d., 360 bulls averaged £95 5s. 3d., 39 heifers £49 18s. 4d., and 33 cows £78 7s. 4d.

The Shire Show.

The stallions and mares at Islington provided a splendid show, reminiscent of the events of pre-war days. The King was a successful exhibitor, and his handsome four-year-old bay stallion, Field Marshal 5th, won the supreme championship, as he did last year. The champion and prize cup awards were as follows:—

The Society's Gold Challenge Cup (value 100 guineas) for the Best Stallion in the Show.—1, H.M. the King (Field Marshal V.); r. and gold medal, F. W. Cope (Blaisdon Draughtsman).

Champion Cup (value £25) for the Best Stallion in the Show.—1, H.M. the King (Field Marshal V.); r., F. W. Cope (Blaisdon Draughtsman).

Cup (value £20) for the Best Stallion in Classes 12 and 13.—1, R. L. Mond (Sundridge Nulli Secundus); r., J. J. Stubley (Ansty Forest Classman).

Cup (value £20) for the Best Stallion in Classes 4, 5, 6 and 7.—1, H.M. the King (Field Marshal V.); r., F. W. Cope (Blaisdon Draughtsman).

The Society's Gold Challenge Cup (value 50 guineas) for the Best Mare or Filly in the Show.—1, Pendley Stock Farms (Marden Evelyn II.); r. and gold medal, R. W. Carson (Halstead Royal Duches).

Gold Medal to Breeder of Champion.—Representatives of the late Sir Walpole Greenwell, Bart.

Champion Cup (value £25) for the Best Mare or Filly in the Show.—1, Pendley Stock Farms; r., R. W. Carson.

Pedigree Live Stock Exports.

The official figures of the exports of pedigree cattle and sheep from this country during the past year have now been issued, and below appears a resume, together with the comparative statistics for 1919:—

	1920.	1919.	1920.	1919.	Month of Dec. 1920.	
	Number.		Value.	No.	Value.	
Cattle	5,022	5,855	£1,087,982	£605,028	136	£16,299
Sheep	4,043	8,521	122,705	161,286	77	4,259
Pigs	443	997	16,953	17,444	36	1,082
Horses	56,593	9,055	3,467,937	994,235	6,428	372,908
Other kinds of animals ..	—	—	123,302	36,951	—	18,067
Totals	—	—	£4,818,879	£1,814,944	—	£412,615

A study of the statistics shows that the export embargo, on account of foot and mouth disease, to certain countries very seriously affected the cattle shipments of December, the figures of which show a reduction of more than 87 per cent. compared with the corresponding month of 1919. All the sources of demand, excepting those designated "Other Countries," show an increase in the number of cattle, the figures being 1142 for U.S.A., 363 Uruguay, 1299 Argentina, 61 Australia, 587 Canada, and 1570 Other Countries. All our customers, excepting Australia, show an increase in the average of declared value.

The effect of foot and mouth disease is shown in the sheep exports in December, these numbering only 77, more than 90 per cent. less than in December 1919. This is mainly owing to the prohibition that has been more or less in force throughout the year. All sources of demand show a reduction in numbers received, excepting Australia, New Zealand, and Germany. The year's total, 4043, discloses a decline of more than 50 per cent. compared with the preceding year. Sheep sent abroad last year numbered 309 to the United States, 244 to Uruguay, 1422 to Argentina, 32 to Australia, 21 to New Zealand, 342 to Canada, 1 to Germany, and 1672 to countries not separately enumerated in the returns. All customers, with the exception of Uruguay, show an increase in the average of declared value.

The January figures again reflect the losses to stockowners owing to the prohibition of export.

To the United States went 42 head of cattle (mostly from Scotland, where foot and mouth disease is unknown), Uruguay took 11, and Argentina 36. The Argentine was the biggest purchaser of sheep, taking 55; 24 went to Uruguay, and three each to Australia and New Zealand.

A Pedigree Live Stock Census.

Last week the Ministry of Agriculture issued the results of a pedigree live stock census of the United Kingdom, taken in the autumn of 1919. The returns were obtained through the medium of breed societies, but as many members who own pedigree animals are not members of these societies, the figures are not reliable. No returns were made of certain sheep, e.g., Cheviots, the Black-faced Mountain, Herdwicks, &c. The following, however, are the numbers given in the return:—

Cattle: 115,618 in all. Aberdeen-Angus, 1948; Ayrshire, 160; British Friesian, 11,273; Devon, 5900; Guernsey, 3706; Hereford, 11,777; Jersey, 6563; Lincoln Red Shorthorn, 16,895; Red Poll, 4246; Shorthorn, 35,726; South Devon, 8405; Sussex, 3096.

Sheep: Total, 486,743. Border Leicester, 4251; Cotswold, 3550; Devon Longwool, 2407; Dorset Down, 25,146; Dorset Horn, 49,378; Exmoor Horn, 23,464; Hampshire Down, 91,802; Romney Marsh, 37,071; Leicester Longwool, 11,689; Lincoln Longwool, 52,615; Oxford Down, 20,230; Ryeland, 3319; Shropshire, 9979; South Devon, 14,302; Southdown, 66,838; Suffolk, 39,006.

Horses: 15,954. Arab, 153; Clydesdales, 3242; Hackney, 2177; Percheron, 305; Shire, 28,455; Suffolk, 3540; Thoroughbreds, 9904.

Notes.

Recently a shipment of pedigree stock left this country for Mollendo, Peru, via the Panama Canal, consisting of Shorthorn bulls, stallions and mares, large black bear and gilts, 12 sheep dogs, and the following sheep:—Southdown, Shropshire, Hampshire Down, French Rambouillet rams, 62 Suffolk rams, 20 Suffolk ewes, and 4 Soay rams.

Referring to the continuance of the embargo on Canadian cattle, Dr. G. C. Creelman, Agent-General in London for Ontario, said that the quality of Canadian cattle is constantly improving, as scrub bulls are being abandoned. Last year an Ontario breeder paid £7000 for a Scottish Shorthorn bull.

Stud Stock Notes.

CATTLE.

Messrs. Evans and Miller, the two South African visitors, while in Australia purchased 40 head of Herefords from the Estate of the late Frank Reynolds, Tocal, N.S.W., for Africa.

A total of 14,432 purebred Herefords were sold by public auction in the United States of America last year at an average of £83 a head. Of these 64 realised £1000 and over and 19 £2000 or more.

Mr. Arthur L. Harris, Condell Park, Maldon, N.S.W., reports having sold the whole of his stud Hereford females to Mr. Thomas Ellis, Waterloo, Walcha, and his imported bull Corncrake to Mr. P. Reynolds, Hobartville.

Mr. Edgar C. McConnell, Cressbrook, Q., reports the following sales of stud Herefords during the month:—1 bull to Mr. Scott, Preston, Q.; 2 cows to Mr. F. Jonathan, Murwillumbah, N.S.W.; 6 heifers to Messrs. Body Bros., via Inglewood, Q.

Mr. Robert Taylor, Green Hill, Campbell Town Tasmania, has purchased from the Estate of the late Frank Reynolds, Tocal, N.S.W., the Hereford bull Twyford Success, full brother to Twyford Hero, champion at Sydney Royal Show, 1920 and 1921.

The number of stud Shorthorns sold by auction in Scotland last year was 400 head greater than during any previous twelve months, and the average price was £40 per head better than in 1919. In twenty years the average paid at auction for Shorthorns has increased from £31 to £260.

The owners of Brunette Downs Station, Northern Territory, advertise 200 young Shorthorn bulls for sale. These are bred on tick country, and are specially suitable for Western Australia and the Territory. The price is £12 12s. at station. Applications should be made to Dalgety and Co. Limited, Brisbane or Perth.

Shorthorns at the Perth (Scotland) Sales in February sold moderately well. The champion bull, Calrossie Field Marshal, was purchased by Mr. Joseph Shepherd for export at 2600 guineas, and the same buyer took Calrossie Regent for 2500 guineas. Garbity Grand Parade also made 2500 guineas, the purchaser being Mr. Nettiefold, of Kent.

Mr. Ivo C. Agnew, of Epping, Tasmania, has imported from New South Wales some Red Polled cattle. A number of Herefords have been sent from Tasmania to New South Wales lately.

The last shipment consisted of 64 head, including 2 bulls from Mr. Robert Taylor's Green Hill stud and 30 yearling bulls and 32 yearling heifers from the V.D.L. stud.

Acting on recommendations of the special committee appointed to report on the best means of developing the Kimberleys and of departmental officers, the W.A. Government has decided to purchase in Queensland 5 bulls and 30 heifers for Moola Bulla Aboriginal Cattle Station, and 1 bull and 15 heifers for Ascot, the Government's holding station for the Wyndham meat works.

At the dispersal sale of the late Mr. W. B. Cunningham's Westburn Shorthorn herd, Brookside, Canterbury, N.Z., there was fairly brisk bidding. Aged cows made 90 guineas to 94 guineas, two and three year old heifers 71 guineas to 101 guineas, yearling heifer 90 guineas, and heifer calf 100 guineas. The top price for English Leicester sheep was 23 guineas for a one-shear stud ram.



CHAMPION ABERDEEN ANGUS BULL, ERMITANO, MASTERTON (N.Z.) SHOW.

Exhibited by Messrs. Burling Bros.

The grand champion bull at the Perth (Scotland) Aberdeen-Angus Show and Sales in February, Mr. J. C. Kerr's Prince Powerful, was sold by auction for 2800 guineas. Escalade of Bleaton, the winner in the February bull class, made 3000 guineas, and Empton, a March bull, fetched 2700 guineas, and is to go to Argentina. One thousand guineas was the top price for females, paid for a two-year-old heifer.

Messrs. Dalziel Bros., Blair Athol, Hunterville, N.Z., propose to hold a dispersal sale of Shorthorn studs on the property on 1st June next, when a total of 104 head of high-class cattle will be auctioned. Included in the offerings will be the noted prize-winning bull Diamond Fairy, and also Knapdale Justice. A full list appears in an advertisement in the current issue. Catalogues can be obtained from any office of Dalgety and Co. Limited.

HORSES.

The annual report for 1920 of the Clydesdale Horse Society of the United Kingdom is to hand. The total number of members is now 3818.

At a dispersal sale of Shires belonging to Mr. Joseph Carson, King's Sutton, Barbury, England, recently, 24 head made the remarkable average of £367. Pendley Goalkeeper fetched the top price, 1400 guineas.

A sale of Clydesdales was held at Lanarkshire, Scotland, a couple of months ago, when 19 head fetched an average of £408 13s. 8d. A mare, Lady Alice, by Dunure Footprint, went for £1550, the highest individual price.

A correspondent to the "Banffshire Journal" writes as follows on Clydesdales in Scotland during 1920:—"The best type of matured geldings have been selling at from £100 to £140. This may seem at the first glance quite a remunerative price, but it is estimated that, counting all costs and risks, a horse has to be worth £100 at three years old before he pays for rearing. With the average price for geldings ready to yoke little better than the price of a good two-year-old bullock, horse breeding is a back number."

The first annual meeting of the N.S.W. branch of the Commonwealth Clydesdale Horse Society was held in Sydney at the end of last month. The following officers were declared elected:—President, Mr. Otway R. Falkiner; Council, Messrs. P. M. Bourke, C. Crichton, J. S. R. Crawford, J. Carse, M. J. D'Arcy, C. Green-tree, Edw. Lloyd Jones, John McDonald, H. W. Potts, S. E.

Roberts, T. Robson, J. Swan, J. W. Shephard, Wm. Schulze, P. Tension, and R. Carroll; hon. treasurer, Mr. S. T. D. Symons; hon. auditor, Mr. E. B. Giles. Exhibitors of show stock having had good reason to complain of the heavy expense of rallying their animals to the show, the matter was taken up at the meeting, and it was decided to write to kindred associations asking them to join in approaching the Railway Commissioners through the Royal Agricultural Society with a view to obtaining reduced freights on show stock to all agricultural shows, and that facilities for transshipping stock from Darling Harbour to the show ground be provided. It was also decided that the Royal Agricultural Society be asked to consider the desirability of increasing the prize money in the registered Clydesdale section in order to encourage entries. A resolution in favour of the adoption of legislation providing for the compulsory registration of stallions was adopted, and as it was reported that the Victorian Government was not recognising the New South Wales veterinary certificates it was decided to communicate with the Victorian authorities requesting them to accept the New South Wales Government certificates pending the adoption of the Horse Breeding Bill.

SHEEP.

Messrs. Sidey and Poels held a sale of Imported Romney Marsh sheep at Buenos Aires at the end of December, when a Woods' ram fetched £130, the top price. The 21 rams sold averaged £80 a head.

At the next Adelaide Show it has been decided to have both competitive and non-competitive sheep classes. This should decide which is going to be the more popular plan with stud breeders.

Goldsbrough, Mort and Co. Limited and Messrs. Powers, Rutherford and Co. will conduct their usual Melbourne sales of stud sheep on 3rd and 4th August respectively immediately following the A.S.B.A. Show.

The cross between Lincolns and Ramboulllets at the Sheep Experiment Station in Idaho, U.S.A., has been named Columbia. The experiments have been going on for five years, and it is reported that the type is remarkably well fixed for the time.



CHAMPION CORRIEDALE RAM, MASTERTON (N.Z.) SHOW.
Exhibited by Mr. T. O. Haycock, Greytown North.

The Shropshire Sheep Breeders' Association (Great Britain), in addition to prizes already given, has donated the Eaton Silver Challenge Cup for competition at the English Royal Show. The cup is valued at 50 guineas, and will become the absolute property of an exhibitor winning it twice in succession or three times in all.

Mr. Franc B. S. Falkner, Haddon Rig, N.S.W., who has just returned from a visit to South Africa, in giving his views on the sheep there, says that while they will improve their wool, he

does not think they will become serious rivals of Australia, which contains much better grazing country as far as the production of Merino wool is concerned.

The Victorian Producers' Co-operative Company Limited announce a sale of stud rams and ewes on behalf of Victorian, South Australian, New South Wales, and Tasmanian breeders at their wool stores, Macaulay, on 3rd August next. In previous years the Victorian Producers' have sold in connection with the Melbourne Royal; this year they propose to hold an auction following the Australian Sheep Breeders' Show.



CHAMPION SOUTHDOWN EWE, MASTERTON (N.Z.) SHOW.
Exhibited by Mr. Jas. Knight, Feilding.

Wangamong Pastoral Company Limited, Daysdale, N.S.W., report the following sales of Merino sheep between October 1920 and 21st March last:—29 stud rams, averaging 27½ guineas; 49 stud ewes, averaging 23 guineas; 606 flock rams, averaging 5½ guineas; 400 flock ewes, averaging 3 guineas. These sheep went to 31 buyers in New South Wales, South Africa, Queensland, Victoria, Tasmania, and Western Australia proportionately in the order written.

Senator J. F. Guthrie reports having delivered to the order of the Japanese Government, through their agents, Dalgety and Co. Limited, Sydney, 23 2-tooth Corriedale ewes, bred on his property, Corriedale Park, Wagga, N.S.W. This is the second consignment taken by Japan from Corriedale Park. In this connection Dalgety and Co. Limited write:—"We might mention that the buyers are extremely pleased with these sheep, and are certain should they again wish to purchase Corriedale ewes in Australia next year, they will have no hesitation in approaching you for the particulars of any sheep which you may be able to offer. The sheep were safely shipped last month along with those purchased from Mr. D. Macfarlane, of Eureka, Rylstone."

The Koonoona Proprietors, Koonoona, S.A., report the recent shipment of the following high-class Merinos to South Africa, namely:—To Mr. F. W. Kock, Grootfontein, Richmond, C.P., 1 special stud ram, two years old, by Lord Klitchener, price 600 guineas; and 15 special stud ewes at 50 guineas each. These sheep follow previous consignments to Mr. Kock of 5 special stud ewes at 50 guineas each, 5 at 30 guineas each, 10 at 25 guineas each, and 20 at 15 guineas each; also 1 stud ram at 300 guineas, three years old, and 2 aged stud rams at 50 guineas each. The whole form a very valuable nucleus of a pure Koonoona stud. To Mr. H. C. Haarhoff, Zoetvlakte, Dist. Kroonstadt, 80 high-class selected ewes, also previously 1 special stud ram two years old, 10 special stud ewes, 5 specially selected rams two years old, and 50 specially selected ewes. These sheep likewise form a strong foundation of pure Koonoona blood. Mr. J. K. MacLean, of Endwell, Queenstown, Cape, has also lately strengthened his pure Koonoona stud by the importation of 1 high-class stud ram and 4 specially selected stud ewes at considerable figures.

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Geo. Ferguson & Co., Port Adelaide.
Henry Wills & Co., Fremantle and Albany.
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Lands.

Queensland Repudiation Act.

Mr. H. F. Hardacre recently heard a number of cases at Dalby under the Repudiation Act. He gave his decisions in Brisbane as follows:—

In the matter of the redetermination of the second period rent under the Land Act Amendment Act of 1920 (the "Repudiation Act") in the case of the following holdings the court considered that the annual rents already determined for the second period of the lease were not less than a sufficient rent:—Kinnoul, Cracow, Wallaby, Palma South, and Coomrith.

In the remaining pastoral holdings the rents were considered to be less than sufficient, and were accordingly determined afresh at the following rates:—Coorada, 34s. per square mile (present rental, 24s. 4½d.); Ghinginda, 48s. (38s. 3d.); Glenhaughton, 36s. (28s. 10½d.); Goongarry, 48s. (35s.); Eurombah, 32s. (28s. 3d.); Cockatoo Creek, 32s. (24s. 9d.); Estramadara, 24s. (15s.); Spring Creek No. 2, 30s. (16s. 6d.); Spring Water, 40s. (25s. 3d.); Lower Palm Tree Creek No. 1, 42s. (40s. 6d.); Lower Palm Tree Creek No. 2, 50s. (39s. 4½d.).

In the following "first instance" cases the rents to be charged for holdings in the Leichhardt district were determined at:—Gwumbagwine, 40s. (present rental, 21s. 6d.); Palma, 33s. 9d. (22s. 6d.).

An example of the unfair incidence of the Repudiation Act is supplied by the case of Mr. Thomas Hunter, of Evora, which was raised to 75s. per mile. He is a New Zealander, who purchased the holding in 1917 for about £40,000. The increase will date back to three years before he purchased. Mr. Hunter said that he purchased in good faith regarding the stability of the rent.

Land Sales.

NEW SOUTH WALES.

Murgha Station, Deniliquin, has been sold by the Exors. of late J. Austin to Messrs. Howe and Horton.

Guntawang, Gulgong, has been sold by Mr. D. Clark to Mr. Leslie Coward, of Lessington. Bourke.

4400 acres of **Barwang Estate**, Young, the property of Messrs. Fowler Bros., have been sold to Mr. C. S. Robertson, of Young.

Merringreen Station, West Wyalong, containing 9000 acres, the property of Mr. A. G. Manning, has been sold to Mr. F. M. Douglas, of Geelong, Victoria.

Fairlie Grange Station, containing 11,491 acres, near Deniliquin, has been sold by Mr. H. L. Austin to Messrs. Donelan and Sons, of Stud Park, Deniliquin, on a walk-in-walk-out basis.

Arrawatta and Nullamanna Estates, Inverell, the property of Mr. Thos. Bowling, and comprising 13,000 acres, were offered for sale in blocks on 5th April. Prices ranged from £10 15s. to £20 for the portions sold.

QUEENSLAND.

Pandanus Creek, Pentland, is reported to have been sold by Mr. A. B. Calcott to Bergl Australia Limited.

Tregoning and Kerwalli, together with Currajong grazing farm, a total area of about 70,000 acres, have been sold by Mr. R. J. Calder to Mr. Phillip Hoskings.

Portion of "The Grove" (Glenusk Block), situated in the Winton district, and comprising 20,000 acres, together with 8500 ewes, just shorn, with 1000 unmarked lambs, has been sold by Mr. J. W. Foulsham to Mr. W. J. P. Harris, Rockhampton.

The undermentioned properties have recently been sold by Mr. Edmund Jowett, M.H.R.:—**Quambetook**, near Nella, together with 25,000 sheep, 182 cattle, and 80 horses, to Mr. J. E. L. Arthur, late of Toolebuc; **Rosemead** and **Mimong**, adjoining Waniola, together with 6400 sheep and 13 horses, to Mr. S. Morell, Melbourne; **West Malham**, on Yorkshire Downs, with 3500 sheep and 170 bullocks and steers, to Mr. Alick Brown, of Garomna, Julia Creek. Also the **Boldrewood Selections** on Ruthven resumption, belonging to Miss Jowett, have been sold to Mr. Wilson, of Orion Downs, who previously purchased **Tarrara** from Messrs. Macintosh and Casey.

VICTORIA.

Mt. Violet Estate, Camperdown, the property of the Estate late John Cumming, has been acquired by the Closer Settlement Board for repatriation purposes.

Record.

Queensland Taxation Questions.

The taxation committee of the Queensland United Graziers' Association submitted the following questions to a recent meeting of the executive of that body:—

That the Royal Commission appointed by the Federal Government to inquire into taxation matters had been appointed by the Queensland Government as a commission to inquire into State taxation, and it was suggested that the Taxation Committee be empowered to appoint a sub-committee to watch the interests of the members of the association on this phase of their inquiry during the sittings of this commission.

It was resolved that the committee be given the authority asked for.

The committee asked for the executive's ruling on the following questions:—

Is it the policy of the association to advocate—

(a) That taxation of leaseholds should be abolished?

(b) That taxation of freehold lands should be abolished?

On this matter the executive adopted the following resolution:—

That in the opinion of this association it is detrimental to the interests of the State and Commonwealth to tax land which is being used for primary production.

Graziers' Federal Council of Australia.

Annual Convention.

At the thirty-second annual convention of the Graziers' Federal Council of Australia in Brisbane last week, motions agreed to at the wool conference in Melbourne on 17th March were adopted, and it was resolved that a committee, with Mr. C. R. Murphy as chairman, should be appointed to consider the basis on which calculations should be made, in order to arrive at the cost of producing wool under present conditions. Mr. Murphy, who was formerly chairman of the Australian Wool Council, and is now a director of "Bawra," gave an enlightening and instructive address on the wool position; his statements are quoted in our Australian Wool Letter in this issue.

The convention resolved to submit to the A.W.U. proposals relative to the settlement of the new shearing and station hand claims, which are set out elsewhere in these pages.

The Hon. A. H. Whittingham, of Queensland, was elected president for the ensuing year. An application for affiliation from the Pastoralists' Association of Western Australia was granted, and Mr. Frank Wittenoom was admitted as representative on the Council for that State.

Fuller details of the Conference will appear in our next issue. The next convention will be held at Adelaide.

The Stockowners' Association of N.S.W.

The regular monthly meeting of the Stockowners' Association of New South Wales was held at the Sydney office on 31st March, at which Mr. W. W. Killen, the vice-president, occupied the chair. There were present Dr. N. W. Kater, Messrs. J. B. Cramsie, F. B. Fleming and E. Killen. Apologies were received from Messrs. Charles Binnie and J. T. Gavel.

A letter was written to the Minister for Public Works urging the speeding up of the construction of the Dubbo-Werris Creek railway extension as an insurance for the live stock in this State. If this line had been constructed live stock to the value of millions sterling might have been saved from the severe droughts which have occurred during recent years, and farmers would have had ready markets for their fodder lines, with direct transit instead of long journeys via Sydney.

A reply was received from the Public Works Department to the effect that the work on this line is being pushed forward as rapidly as funds available will permit. The department stated with regard to the transfer of men from the Werris Creek end of the line to the Binnaway end that it was done to expedite the

work, as sleepers are now more readily obtained at Binnaway than at Werris Creek.

Correspondence was received from Moree in reference to a stock stealing case, and it was regretted that time was not available to secure special counsel to prosecute the important case which was recently held.

It was decided that the association protest against the fixation of meat prices, as same will reflect back upon the primary producer.

New A.W.U. Claims.

We give herewith a few of the principal new claims lodged by the A.W.U. for shearing and station hands. Whether they are genuine or sheer bluff, they are of course utterly impossible, a fact which in view of the straitened circumstances of the pastoral industry to-day the claimants are probably perfectly aware. It is expected that the log will come before the Commonwealth Arbitration Court for hearing at an early date. We will not discuss the claims at length here; all the comment that is necessary will be made when the court starts its hearing.

Rates for Shearing.

1. The minimum rates to be paid for shearing to employees shall be as follows:—

If Rations Not "Found."

For flock sheep (wethers, ewes, lambs), £3 per hundred.

For rams over six months old (other than special stud rams) and for ram stags, £9 per hundred.

For stud ewes and their lambs (other than special studs), £3 10s. per hundred.

For special studs as specially agreed, but so that if the engagement be per day the rate shall not be less than £1 6s. 8d. per day, with cook and rations and shearing requisites found.

All double-fleece sheep to be paid for at double the above rates respectively.

But if the total sum which the shearers would receive under these rates amounts to less than £9 10s. per week without keep of the employment, the employer shall pay the deficiency to the employee.

If Rations "Found."

The rate above-mentioned, less 30s. per week.

But if the total sum which the shearers would receive under these rates amounts to less than £8 per week with keep of the employment, the employer shall pay the deficiency to the employee.

Rates for Crutching.

The minimum rates for crutching, wiggling, or ringing at sheds or to employees other than station hands shall be—

If Rations Not "Found."

For crutching between the legs only, 12s. per hundred.

For all other crutching, 15s. per hundred.

For wiggling or ringing, 7s. per hundred.

For either wiggling or ringing in addition to crutching, 2s. per hundred in addition to the crutching rate.

For wiggling and ringing, 11s. per hundred.

For wiggling and ringing in addition to crutching, 3s. per hundred in addition to crutching rate.

But if the total sum which the crutcher would receive under these rates amounts to less than £9 10s. per week without keep of the employment, the employer will pay the deficiency to the employee.

If Rations "Found."

£1 6s. 8d. per day.

But if Piecework Rates.

For crutching between the legs only 10s. per hundred.

For all other crutching, 13s. per hundred.

For either wiggling or ringing in addition to crutching, 1s. 6d. per hundred in addition to the crutching rate.

For wiggling and ringing, 10s. per hundred.

For wiggling and ringing in addition to crutching, 2s. 6d. per hundred in addition to the crutching rate.

But if the total sum which the crutcher would receive under these rates amounts to less than £8 per week with keep of the employment, the employer shall pay the deficiency to the employee.

Rates for Shed Hands.

The minimum rates for acting as shed hand and generally useful at the shearing or at crutching to be paid to employees (other than penners-up) shall be £6 per week with keep.

But for penners-up, £7 per week with keep.

Overtime shall be paid for at double the ordinary rates.

Woolpressers.—Where "not found," rates are claimed that will give a total weekly minimum of £9 10s. If "found," the minimum is to be £8 per week. This is for piecework. For time work the rate claimed is £8 per week with keep.

For cooks, 10s. per week for every man cooked for is claimed, with a weekly minimum of £8 and keep, after paying "any necessary off-siders."

Claims are also made for experts, woolclassers, and engine drivers, although these men are working under State industrial agreements, and do not come under the Federal award. The minimum weekly guarantee for woolclassers is £15 per week, with keep.

The employer shall pay the railway, coach, and/or other fares of an employee to the place where the work is to be performed and back to the place where the employee is living or sojourning at the time of entering into the agreement for the employment, but in the event of the employee having agreed to work at a second shed or scour the second employer shall pay the fares to such second shed or scour, and also shall pay the return fare as above specified. In the event of the employee having a succession of sheds or scours, each employer after the first shall only be called upon for the payment of fares from the preceding shed or scour, and the last employer shall pay the fares for the return of the employee as above specified.

No person under the age of 16 years shall be employed in any capacity in or in connection with shearing or station operations.

The number of shed hands employed shall not be less than the number of the shearers on the board.

All sheep are to be dagged before being penned for shearing, and no maggoty sheep are to enter the shed unless they have been treated with an antiseptic. Who is to decide about the daggy or maggoty sheep, who is going to handle them, and what sort of rates and conditions are to be demanded for such work?

Other demands are:—

(a) The employer will provide all the shearing machines, combs, cutters, and shears required and suitable machinery in good order, and competent and sufficient persons to keep the machinery in order and to work the machinery.

(b) For every 35 shearers, where machines are used, one grinder at the least will be employed.

(c) For every five hand shearers employed the employer will provide one grindstone at the least.

In case the employee is stopped from shearing through breakage of the machinery the employer will pay to the employee—

If "found"—

At the rate of £1 6s. 8d. per day;

If not "found"—

At the rate of £1 11s. 8d. per day

for every day or part of a day of working time so long as there are sheep fit to shear.

But the employer may on or after the expiration of one week from the beginning of the stoppage (unless in the meantime this agreement be terminated by mutual consent) terminate the agreement of his own will.

The ordinary working hours of the shearers will be 44 hours per week, and will be worked in two-hour runs between the hours of 7.30 a.m. and 9.30 a.m.; 10 a.m. and 12 noon; 1 p.m. and 3 p.m.; 3.30 p.m. and 5.30 p.m. on Monday to Friday inclusive, and 7.30 a.m. and 9.30 a.m.; 10 a.m. and 12 noon on Saturday. The bell will be rung three minutes before the termination of each run and no shearer will catch another sheep during the run after the bell has rung.

But if ewes or lambs are in the pens awaiting shearing the shearing may be continued on Saturday after 12 noon for not more than half an hour, with the consent of the claimant organisation, expressed by its shed representative (if authorised to consent), and so far only as may be necessary for the purpose of shearing the said ewes and lambs.

Rates for Station Hands.

The minimum rates to be paid to male or female station hands (other than cooks) shall be—

£4 10s. per week with keep.

But for cooks, male or female—£4 10s. per week with keep if cooking for less than six persons; but if cooking for six persons or over the rates shall be £6 per week with keep.

The hours of duty shall not, without payment for overtime, exceed 44 per week in the case of station hands other than cooks.

Payment for overtime shall be made at the rate of time and a-half.

"Station hands" means all employees, male or female, whose work is performed within the boundaries of the station, or whose work from the nature of the employment or by the direction of the employer is performed wholly or partly elsewhere.

Machinery Exhibits at the Sydney Royal.

FORTESCUE AND SONS LIMITED.

The principal exhibit of Geo. E. Fortescue and Sons Limited, of Arncliffe, Sydney, at the Sydney Royal Show was the latest invention in harvesting machines, a high-speed non-stop header harvester arranged on a frame, the latter being mounted on a tractor, and readily detachable from same. The tractor is then available for ploughing, &c. This invention created extraordinary interest amongst wheat farmers on account of its wonderful simplicity and novel features. It has only about 40 per cent. of the parts usual in ordinary harvesters. It is claimed to be capable of harvesting from $1\frac{1}{2}$ to 2 bags of wheat in the same time as horse machines can do one bag, as machines are now constructed. It pushes straight into the crop, and will open up its own lands, the bagging being done non-stop, the exhaust of straw, dust, &c., being at the rear. It is also specially adaptable for bulk handling. It may be run at higher forward speed in light crops. It is adaptable for use in down crops, as the speed of the harvesting machinery is maintained while the forward speed of the tractor or horses can be as slow as desired. The machine has been tried out for the past three years, and at its first public trials last season an order was placed by one of the most practical farmers in the State, other orders being booked at the show. It is intended to place the header on the market mounted on the front and rear ends of a light, novel, patent tiltable tractor, this clever invention making it possible to reduce the cost, also the weight, of the harvester so much that, including the tractor complete, it will weigh only approximately the same weight as other makes of harvesters of similar width cuts. The necessary harvesting parts of an 8-ft. machine weigh only about 12 cwt., which may be removed from the tractor in about 10 minutes worktime. The latter may then be used to drive chaff-cutters, saw benches, pumping, light ploughing, harrowing, drawing rollers, hauling trailers, sheep shearing, &c., it being a single-unit general-purpose light-power universal runabout. A machine suitable for horses having a light engine to drive the harvesting parts will be made and tried out at the earliest opportunity.

The same firm showed a variety of lines indispensable for the man on the land, including their famous I.X.L. and "Dreadnought" windmills, I.X.L. poison carts, I.X.L. ready-mixed rabbit poison, rabbit traps, "Bosker" fumigators, "Fumogas" for use in same, I.X.L. fire fighters, water carts, slop carts, sheep spraying carts, troughing, pumps, pumping heads, steel wheel lorry waggons, trailers, transports for engines, saw benches, winches, hoists, farm pump engines combined with pumping jacks ($1\frac{1}{2}$ h.p., adaptable for use with windmills), concrete mixers, bluemetal tar mixers, tar boilers and spreaders, moulds for making concrete pipes, "Saunderson" Universal tractors for ploughing and general purposes, road scrapers, delvers, pumps, tanks, &c.

DANKS AND SON PROPRIETARY LIMITED.

Of interest to the farmer and grazier was John Danks and Son Proprietary Limited's exhibit. The high level of efficiency reached in the mechanics of pumping was well illustrated by a working exhibit of "Billabong" Australian-made mills and pumps. One of these "Billabong" mills delivers as much as 112,656 gals. of water in 24 hours. The actual weight of this would be about 502 tons. If the water had to be pumped by hand or carted it is manifest that the cost would be out of the question—yet wind power does it practically free. This "Billabong" mill does the work without attention even. By attaching a self-acting tank regulator the mill will keep tanks and troughing filled automatically. The level of the water stops or starts the mill pumping. Another point is the mill cannot race and damage itself in a gale. It automatically pulls out of the breeze, and comes back into the wind without racing. Centrifugal pumps were shown pumping torrents of water. Danks make them in sizes from 1 inch to 8 inches. The rotary is about the best pump for irrigation purposes, being smaller and cheaper than reciprocating pumps required to do a similar amount of work. Cheap mechanical power in the form of the "Wallaby" petrol farm engine was also shown. These engines are of various horse-power, and cost about half the price of the imported engine.

Clydesdales at the Otago Show, N.Z.

The "New Zealand Farmer," referring to the Clydesdales at the recent Dunedin Show, says:—

"When the interest went out of Clydesdale horse breeding, the Dunedin Show fell upon very evil times. A change in its date from the summer to an autumn fixture failed to gain any extra support from stud stock breeders. . . . Even the Clydesdale section this year failed to provide satisfactory competition, and were it not for the extra good team of breeding horses from Messrs. Thomson and Co.'s Wairongoa Estate, the enthusiasts of the Scotch breed who annually make a pilgrimage to Dunedin,

for sentiment with the old breeder dies hard, must have spent a very disappointing week.

"Mr. George Thomson built on a sure foundation when he purchased the imported horse Newton Chief from the Taieri breeder, Mr. James Blair, for he left his mark for good in the Wairongoa stud. His stock have the clean hocks, big blue feet, and hard bone. It is indeed unfortunate that more extensive use was not made by the stud masters of the Taieri when that good horse was available to them. To-day they would have been in a position to maintain their show at its old level, but instead, there is a great shortage of good young horses. This is the first year since the war that the Wairongoa stud has come out, but the intervening years have not been wasted. The young stock from this stud has never before been equalled for quality. In the young stock, there were excellent demonstrations of the ability of the Dunure Footprint horse, Dunure Fabric, to nick with the Newton Chief mares. All three classes in the male section fell to Thomson and Co.'s colts, and the three winners paraded for the championship. The two-year-old Scotland's Victor, by Scotland's Viceroy (imp.), and out of Brilliant IV., by Newton Chief, repeated his success at Invercargill, where he owed his position to Mr. H. E. B. Watson's judgment. The Christchurch judge, Mr. McClure, on this occasion also favoured the four-year-old Brilliant Chief, by Newton Chief, and out of Baron's Brilliant. The latter great breeding mare, by the famous Baron's Pride, it is regretted to note, recently completed her term of life and passed away at Wairongoa. The two-year-old is a very flash mover, being one of the best goers and closest actioned horses ever seen in a ring, and the way in which he handles himself is an inspiration, and young breeders who wish to learn what perfect action means should see this horse moving. The grand big three-year-old Brilliant Again, by Newton's Chief, and out of Baron's Brilliant, was also put over the four-year-old (reserve at Invercargill), and reserve to the two-year-old, but it is pretty certain that did he move himself with the freedom characteristic of the younger colt, he would have been champion instead of reserve, for he has rare quality with his great size. The four-year-old Brilliant Chief, which is a full brother to the reserve colt, is a good horse, with the hard, clean bone of Newton Chief, but he has not the great size of his younger brother. This horse is extra good at the ground, and particularly so in front. He was opposed in his class by A. W. Douglas' Sandy Belle, a useful sort of horse, by Baron Everest (imp.). There were some who thought James Birtle's President, by Baron Wigton (imp.), and out of an Agitator mare, should have won in three-year-olds. This horse has a good outlook, but it must always be remembered in judging Clydesdales that one must commence at the ground, and it is here where Thomson's horses are so exceptional. The yearlings provided the largest class, and Thomson and Co. had a fourth successive win with a colt by Dunure Fabric out of the Bonny Buchlyvie mare Lady Buchlyvie (imp.). This is a big growthy colt, with good feet. H. Tisdale's second prize colt, by Maynard (imp.) dam Lady Elaine, by Knockinlaw Favourite (imp.), had not the good size of the first prize colt nor the grand foot, but he shows the quality of bone so necessary for hard wear in a horse.

"The female section provided the opportunity to Messrs. Thomson and Co. to bring under the notice of breeders some of their remarkable collection of valuable Clydesdales. There was only one mare in the brood class, this being the imported Moireen, by Oyama. She had a horse foal at foot by Dunure Fabric (imp.). This is a very flash foal with the desirable lengthy cannon bone, and if he keeps going right should be a future champion, for he shows all the good quality associated with the Wairongoa team. Moireen, though now an aged mare, had many fine successes in her day, these including first at the Highland Show as a three-year-old prior to her advent into New Zealand from Scotland. The class for dry mares provided another opportunity for that great mare Mona Ronald to continue her successful career in the ring. To-day she is held to stand as the undoubted champion female of New Zealand. Her grand size, exceptional Clydesdale character, and grand movement, either at the walk or trot, place this mare in her enviable position. It is a great pity that her sire, the Montrave Mac horse, Squire Ronald, who stood second to Baron Bold in his day, had such a short life in Southland. Thomson and Co.'s noted mare Agatha II., by Newton Chief, was not forward, but a good sort of brood mare in J. M. Smith's Winsome Ruby, by Baron Winsome, and out of an Agitator mare, was second. There were some exceptional fillies in the three-year-old class. The judges were a long time in agreeing, the North Canterbury man wanting the Watson-bred filly Gay Girl, by Dunure Fabric, and out of the champion mare, now with her daughter owned by D. G. Wright, in the position of honour. Mr. John Macdonald, of Oamaru, would not yield in his admiration for Lady Scotland, by Dunure Fabric, and out of the imported mare Bonny Queen, by Scotland Yet. This is a particularly sweet filly, although she was brought out in rather thin condition. One could not get away from her great quality. She was particularly well set and extremely good at the ground, and is undoubtedly one of the best fillies yet seen in the New Zealand

show ring. Gay Girl was shown in good condition, but was not disgraced in going down to such a good one as Lady Scotland. She is a big, roomy filly, and is both good at the walk and trot. This filly is a little open behind. Third was Thomson's Lady Ena out of Ena II., by Sir Thornley (imp.). This is another extra good filly, stylish, and a good mover, but she has not the great quality of the winner. Lady Scotland, it is worth noting, was placed over both the champion and reserve champion colts in the test for the Ainge Challenge Cup, in which colts or fillies, three years and under, bred and owned by the exhibitor, competed. These as well as their sires and dams must be declared free from hereditary unsoundness. The winning two-year-old, Thomson and Co.'s Lady Moireen, yet another daughter of Dunure Fabric, stood out in her class as an extremely sweet filly. This is a daughter of Moireen (imp.), and if a little undersized at present, is nevertheless a mare that promises to make a name for herself, for she has great quality, moves well, and it is most difficult to find fault with her. Second was A. S. Gillespie's filly by Scotland's Viceroy. Another rare filly won for Thomson and Co. in yearlings. By Dunure Fabric, she is out of the erstwhile famous mare Agatha II., by Newton Chief. This is a filly of both size and good quality, and represents the modern type of the breed to very great advantage. She has good pasterns, is nice and close behind, and uses her good feet and legs with rare freedom. Second, Robert Tisdale's filly by Maynard and out of a daughter of Baron Bold, showed good quality, but is a little short and straight in her front pasterns. The champion mare Mona Ronald, which was awarded the Clydesdale Horse Society of Great Britain and Ireland's gold medal for the best mare or filly on the ground, also won with her daughter Gay Girl as a pair. Thomson and Co.'s Moireen won for mare and two of her progeny, and the same breeders won in the group of three with their trio of first prize fillies."

The Latest Books.

Farm Crops Laboratory Manual and Note Book, by F. W. Lathrop. (London: Lippincott Co.; price, 4s. 6d. net.) A series of notes suggesting some methods of teaching farm crops. There are nearly forty exercises in the manual, and the instructor will find this small book of use to him in his work.

Three Real Bricks, by T. E. Grattan Smith, and **Adventures in Southern Seas**, by George Forbes. (London: Harrap; price, 6s. net each vol.) These two volumes, which came from the press at the Christmas season, consist of two most attractive and absorbing tales for young folk. For the imaginative boy or girl the thrilling incidents will be a rare pleasure, and we prophesy that many parents will sometimes take up the volume to their profit.

Lucinda, by Anthony Hope. (London: Hutchinson; price, 8s. 6d. net.) Lucinda is one of those delightful wayward girls Anthony Hope knows so well how to draw, and her story is one which fascinates by its simple charm, yet grips with its emotional intensity. "Cosmopolitan in its setting—the scene is laid in Devon, Venice, Paris, and on the Riviera—"Lucinda" is a fine piece of work, and gives us the fullest and completest revelation of the heroine's charm.

Shorthorns in Central and Southern Scotland, by James Cameron. (London: Blackwood and Sons; price, 12s. 6d. net.) Mr. Cameron has given us a book which will be of intense interest and value to Shorthorn breeders the world over, for he brings out a part of Shorthorn history which has hitherto been imperfectly known and appreciated. Its numerous references render it interesting to the general reader, and its descriptions of many herds and events of historic importance, and its splendid illustrations make it invaluable to all breeders or admirers of pedigreed stock.

Dead Man's Plack and an Old Thorn, by W. H. Hudson. (London: J. M. Dent and Sons; price, 7s. 6d. net.) This volume consists of two short stories. The first, "Dead Man's Plack," is about a human being. "The Old Thorn," much shorter, is a tale of a tree and a human being. The first story is that of Elfrida, the wife of King Edgar, and the murderess of his son Edward, and we think has many beauties. But the second tale is richer and more beautiful. Readers acquainted with Mr. Hudson's style will welcome this latest volume, though they will probably not all be satisfied with the work.

Winsome Winnie and Other Nonsense Novels, by Stephen Leacock. (London: John Lane; price, 5s. net.) Mr. Leacock's book is a burlesque of certain writings of the day. Five of the eight novels in the book are parodies of fiction, containing a fine collection of jokes that cannot fail to delight all readers. "Winsome Winnie" is narrated after the best mid-Victorian romance styles; "Broken Barriers, or Red Love on a Blue Island," is the kind of thing that has replaced the good old sea story; and the remaining novels treat, amongst others, of the detective and ghost stories, as handled by modern writers. Every page calls forth much laughter.

Publishers' Department.

Messrs. Pitt, Son and Badgery, Sydney, have a motor lorry for sale, nearly new. See advertisement.

THE SAVAGE ARMS CORP., of Utica, U.S.A., have commenced a series of advertisements beginning with this month's issue.

The Pacific Commercial Company, Sydney and Melbourne, advertise the CLETRAC tractor in this month's issue.

THE P. AND O. S.N. COMPANY LIMITED have declared an interim dividend on deferred stock at the rate of 12 per cent. per annum.

THE AUSTRALIAN, MERCANTILE, LAND AND FINANCE COMPANY LIMITED has declared an interim dividend of 5 per cent., free of tax.

MURTON'S DIP, which is a well-known specific and cure for footrot, is advertised in this issue by the Australian agents, Messrs. J. H. Rudd and Co., 115 William-street, Melbourne. Murtton's Dip is an arsenical preparation that has been proved, and is recommended by large numbers of sheepowners for the trouble.

The accounts of the AUSTRALIAN PASTORAL COMPANY for the last year show a net revenue from wool and stock of £274,528, as compared with £258,588 for the preceding twelve months. Owing to the uncertainty of the wool outlook the directors have found it advisable to reduce the dividend from 8 per cent. to 6 per cent., free of tax.

DODGE BROS. propose to spend between £1,500,000 to £1,600,000 in building an addition to their factory, which will include a new pressed steel building with 860,000 square feet floor space and an eight-storey building, with 140,366 square feet floor space. The total floor space will now be 100 acres, as compared with 8 acres of 1914. Up to date the maximum production is 600 cars a day, but when new buildings are finished this will be greatly increased.

We draw attention to the page advertisement appearing in the front part of this issue referring to the GLORIA LIGHTING SYSTEM. The Gloria is a wonderfully cheap and efficient proposition, comprising only a steel reservoir, flexible hollow tubing, and the necessary patent burners. It gives a steady, soft, white light at a minimum cost. A coupon included in the advertisement will bring you a catalogue and full particulars of the system.

F. W. Williams and Co. Limited, 41 Hunter-street, Sydney, write to us re BONE WEAKNESS IN LAMBS:—"In reply to your correspondent's request for advice in the March issue, we think the best information that can be given on the subject is the special advertisement appearing in this issue on page 313. The properly medicated lick cannot be eaten by stock in heavy quantities, its proper effect being that small quantities satisfy quickly, thus saving about three times the salt that would be otherwise eaten, consequently the same percentage of freight, &c. It is the medicated lick that we recommend in reply to your advice, although some prefer the molasses lick at lambing time, so we refer to the two of them in the one advertisement."

Canadian Initiative.

Here is the story of a young Canadian who got out of the ruck. About the time when the farmers of his neighbourhood were just finishing threshing their crops this young man bought a GMC 2-ton lorry, with a special grain-tight body. Then he let it be known to the farmers of the community that he was prepared to haul their crops to the market. At the very reasonable price of 10 cents a bushel (5d.) he had no difficulty in securing a volume of orders for haulage from neighbouring farms to the grain elevators. To this price he added 1 cent. per bushel per mile for all over 10 miles. In two months his plan was successful to the tune of \$1620.00, or about £333, gross profit. His only expenses out of this sum were for petrol and lubricant, which he found moderate. He operated and cared for his own lorry, of course.

Artesian Boring Notes.

A bore at Lake Letty Station, in the far north of South Australia, recently struck a flow of 100,000 gallons per day of good water at a depth of 1600 ft.

THE PASTORAL REVIEW

ALL OVER
AUSTRALIA
NEW ZEALAND
&
THE WORLD

Expert Information and
Statistics on the World's Wool,
Meat and Produce Trades.

The Organ of the
Live Stock and Agricultural
Industries.

NUMBER 5.

MAY, 1921

VOLUME XXXI.



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A JOURNAL AND A RECORD

Of all matters affecting the Pastoral and Agricultural Interests throughout Australasia.

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Melbourne: The Wool Exchange, 122-138 King-street.

Cable address, *Pastoral*, Melbourne. Code, A.B.C. 5th edition.

Sydney: Bligh Chambers, 10 Bligh-street.

GREAT BRITAIN—

Joseph Raymond, Manager, Weavers' Hall, 22 Basinghall-street, London, E.C.

Cable address: *Woolshed*, London. Code, A.B.C. 5th edition.

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SOUTH AMERICA—Buenos Aires: Australan, Mercantile, Land and Finance Company Limited (R. E. Bailey), Calle Cangallo 315. Punta Arenas: C. Constanduros, Calle Valdivia 782.

U.S. AMERICA—British and Colonial Press, Inc., Cunard Building, 140 Dearborne-street, Chicago, Ill.

AFRICA—Cape Province: Butler Bros., Cradock.

Kenia Colony: T. A. Wood, The White House, Nairobi.

Editorial Notes.

The most important topic dealt with this month is, naturally, the wool position, and besides our trade expert's review the subject is discussed in a leading article advocating loyal co-operation and co-ordination of all wool interests to give the present scheme a fair trial.

The Current Issue.

The market has taken a decided turn for the better in the last few days, and the hope is engendered that the tide has at last turned. "Talgai," a practical writer of many years' experience in sheep and station management, contributes articles on Handling Sheepskins and Feeding Sheep in

Drought, subjects which, though hardly apropos to present conditions, are such as will occupy the attention of sheep men as long as the industry exists. A new series of articles on Common Sheep Diseases, also by an experienced specialist in that line, is begun in this issue, while other contributions that will repay close study are:—The Northern Territory Problem, Wool Production in Canada, Founder in Horses (illustrated), War on the Maggot, &c. The interesting account of the Motor Trip to Central Australia is advanced another stage, while Letters to the Editor are numerous and important, especially the following:—The Strike and other Social Evils on the Land, the South African Meercat and the Rabbit Pest, the Shearing Question, Warts on Cattle, and the Subdivision of New South Wales. On Utility Page will be found a good plan, with specifications, for cheap cattle yards for small properties, and the following important subjects should also be noted:—Perennial Red Clover and its Cultivation, Sunflowers for Summer Fodder, Preparturient Paralysis in Ewes, How to Judge Fat Cattle, Regulating the Bull's Service, Staggers in Stock, &c. "Fife and Drum" gives a very readable account of the Warrnambool (Vic.) Races, and also continues his series of contributions on leading blood sires, the horses this month being Poetical and Magpie. Some exceptionally good pictures are included in the illustrations, particularly two pages of New Zealand and New South Wales harvesting scenes, a big New Zealand Packing Works, a page of excellent jumping snapshots, South Australian sheep country, a record Western Australian load of wool with camel team, pictures of Toorilla Plains Station, Queensland, and leading Blood Sires. The issue is a full one, but it contains nothing that is superfluous or unreliable, the trade sections, as usual, giving full reports of world-wide conditions and markets, supplied by special correspondents of high standing in the trades of which they respectively write.

* * *

The slump in live stock values illustrates how intimately the pastoral industry is connected with the frozen meat export trade. The prosperity of the one *Live Stock Values* almost invariably implies activity in the *and the Meat* other. The present time is no exception to the rule. A number of factors have contributed to bring sheep and cattle values down to the current level, and in the widest sense it is the same set of conditions that is operating against the profitable conduct of the meat export trade. The tightness of money is forcing graziers to realise more stock than the local markets can conveniently absorb, a similar financial stringency has reduced the purchasing powers of consumers on the other side of the world, resulting in a reduction of

meat values. True, there is at the moment a large accumulation of frozen meat in cold store in England, but that is mainly due to the same cause. Had the European countries been in a position to purchase some of the meat, as they would had conditions been normal, stocks would have been smaller and the market more stable. The high cost of production in the grazing industry has its corresponding factor in the meat trade in increased freights and charges. It is difficult to say just what it costs now to bring to maturity a wether or bullock, but it is known for a fact that the exporter cannot kill, wrap, freeze, and ship them to London under about 4d. per lb. as against three half-pence six years ago. Sufficient to say that to-day wether mutton is only fetching 8d. per lb., and Australian beef 4d. to 5½d. per lb. at Smithfield, and there are indications that the market will go lower. It is satisfactory to hear that in the opinions of Sir Thomas Robinson and Mr. F. J. Walker, both of whom have recently been in London, and are intimately connected with the meat trade, the present depression is only temporary. They confidently anticipate that better conditions will prevail in six months' time. There seems no reason to doubt their prognostication. The improvement cannot come too soon.

* * *

The law of supply and demand is to-day giving many woolgrowers food for serious thought, and the one who has to give it the most careful consideration is the man who grows crossbred wool.

Merino or Crossbred? For many years there has been a marked trend in Australia in favour of the crossbred, the percentage of such wool in our total clip continually increasing. During the war the crossbred man was "on velvet." He had a good double demand, mutton being eagerly wanted, and also crossbred wool for military clothing. Now, however, what do we find is the position? Winchcombe, Carson Limited, in their annual review of the trade, state:—"Most crossbreds are out of favour. Fine parcels and comebacks are changing hands at fair values. We certainly consider that growers producing these types have little to fear. Relatively speaking, they are to-day the cheapest wools on the market. It seems highly probable that for this reason alone buyers will sooner or later commence to give them more attention. But the coarser grades are difficult of sale. Prospects for them are far from promising. About one-third of the stocks of unsold appraisement wools comprise coarse parcels. Until fashions change, and the public once more develops a taste for the rougher type of wearing apparel, no great revival in demand is likely. Ever since the war the public has favoured the finer types of cloth." On the face of it, then, the ordinary run of crossbred does not appear an attractive proposition at present, and we believe that in obedience to the law of supply and demand we will see not only a check to the falling-off in our Merino numbers, but an increase. We hold a premier position in the output of high-grade Merino wools, and have always deplored the continually decreasing proportion being grown. Of course, many parts of the country are more suited to crossbreds than Merinos, and in such parts owners would be foolish to make a change, but on other country, where previously Merino wool was grown to perfection, but was replaced by crossbred at the instigation of the demand for that class of staple, we think owners would be well advised to revert to the Merino, or perhaps the Corriedale or fine comeback. There is a couple of years' supply of crossbred wool already on hand, and it must be absorbed before we can expect much revival of demand in that direction.

It is our usual practice at this time of the year to attempt to forecast the course of values at the forthcoming annual ram sales in Sydney and Melbourne. Last year what promised to be a fiasco was converted at the last moment into a quite successful sale by the breaking of the prolonged drought. There was also very valuable support from South African buyers for Merinos, and a good average of prices was maintained right throughout the series. For British breeds, however, the demand was dead. In regard to this year's sales, we fear that business will be dull for all breeds, Merinos included, but particularly for British breeds. The only saving feature is the good season that is being experienced almost generally over Australia, and the hope of securing good Merino rams at a cheap or reasonable figure may serve to increase competition and maintain prices at a decent level. Several factors, however, will militate against the success of the sales—the collapse of the wool market—which, of course, will make itself felt far more seriously in British breeds—in conjunction with low values for mutton, the general financial depression, and, we believe, the absence of the major portion of the South African buying strength, being some of the principal elements that will operate against high prices. As far as British breeds are concerned, we do not wish to appear unduly pessimistic, but the outlook for them is very black. Most crossbred and all other coarse grades of wool are practically unsaleable, and seem to be right out of fashion now that since the war public demand has been all for the finer cloths, while mutton is worth little more than half what it was during the war. If there is a rush of rams of British breeds on to the market it is doubtful whether the bulk of them will bring more than butchers' values. Corriedales should do better, as their wool, which should run about 56's, stands a better chance of recovery; in fact, with fine crossbreds and comebacks, it will probably be amongst the first to show an improvement when wool values recover.

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A good suggestion is put forward by a correspondent in this issue with a view to getting at the root of labour unrest and other social evils on the land. He maintains that the principal factor operating against a better state of affairs in rural life generally is the ignorance of the average city dweller regarding economics, and his unfounded and unreasoning prejudice against and envy of the man who carries the country's burden, and from whom he has his being. As it is obviously no use attempting to educate this section of the community through the columns of the press, or rather that portion of it which would allow its pages to be used for such a purpose—owing to the fact that such educative articles would never be looked at by those for whom they would be principally intended—our correspondent suggests the adoption in this country of a plan on similar lines to one being carried out in the United States. The picture theatres, of which we have many thousands, should be made the principal propaganda agents, the idea being that primary producers should have moving pictures taken of every phase of farm and station life, showing the difficulties they are continually fighting against in the shape of blowflies, rabbits, wild dogs, drought, &c., the labour involved in preparing the ground and sowing a crop, followed by the too often resultant failure due to a variety of causes, such as rust, heavy rain and wind on the ripening crop, dry seasons, and so on. Also statistics could be presented ac-

companied the pictures of different stages of production, showing what each section of the community gets out of the value of the product in the course of its marketing in Australia and in London. Competent and practical lecturers could give brief explanatory discourses and invite questions on the pictures. The producers' associations might arrange for the taking of the pictures, which we believe would be welcomed by both the theatre proprietors and the public. Most theatres have on their programme at least one or two items of an educational or instructive nature, and these, together with pictures of current events, especially if of local interest, are always very favourably received.

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Amongst the items appearing in the new tariff schedule under consideration by Parliament, and which are of special interest to woolgrowers, we notice that

Tariff Burdens. sheep-marking oils have come in for special attention, the Minister for Customs (Mr. Massy Greene) having almost doubled the duties. Under the 1908-1911 tariff, they were 4s. per cwt. all round; they were raised in 1914 to 5s. (U.K.), and 6s. general, but the new duties are 8s. and 10s., or 25 per cent. ad valorem and 35 per cent. Also under the 1908-1911 tariff sheep dips were free all round. Duties are now imposed of 20 per cent. (U.K.) and 30 per cent. (general). Disinfectants, which include such items as weed, scrub, and tree killers, have also been raised to 25 per cent. and 35 per cent. from 10 per cent. and 15 per cent. Arsenic and arsenical preparations, formerly free (U.K.) and dutiable at 5 per cent. under the general tariff, have now to pay 25 per cent. and 35 per cent. It is duties like the above that make us wonder what sort of statesmen (!) we have at the head of affairs in Australia. There is no need for ponderous debate over such items at a time like this, when the pastoral industry is, colloquially speaking, right up against it. Instead of imposing further burdens on a business which is already carrying far more than it should, and especially in view of the collapse of the wool market, every effort should be made by Government to render all the assistance that lies in its power. These ridiculous duties should be abolished by a stroke of the pen. There is no need for argument about the matter. If the Government will not see the wisdom of allowing all tools of trade in connection with primary production to come into the country duty free always, they must at least realise the vital importance of reducing costs to the grower temporarily. What do a few prospective pettifogging local industries matter when the solvency of the pastoral industry—the mainstay of the country—is at stake?

* * *

Among the Letters to the Editor this month will be found a valuable contribution on this subject, which we also dealt with last month. Mr. Abbott's

Australia letter in this issue, together with a map of New South Wales, showing the suggested subdivision into four States, indicates clearly the advantages that would be gained by the country in general if the present centralised system of Government were done away with. There can be no doubt whatever, taking New South Wales as an example, that all parts of the State, with the exception of the central division, are heavy losers under the present system, and that consequently nothing like the maximum of production is being got out of the State as at present constituted. The western division suffers because of its comparative isolation and distance from the seat of Government, and its crying needs, such as

railways, dog-proof fences, locks along the Darling, &c., are unheeded by the powers in Sydney, who are busy inventing unnecessary public works in the city to provide employment for their importunate and indigent supporters. The northern districts—under Mr. Abbott's scheme to form the New State of New England—are penalised because they are condemned to long rail haulage of produce and passengers hundreds of miles to Sydney, although they have a good port of their own. The same argument applies to the south—to be known as the State of Riverina—but those ports will remain useless as long as railway construction is vested in the Government in Sydney, for their policy always has been and ever will be the glorification of that city at the expense of the country, and to that end they never, or as long as they can help it, will authorise a line that does not feed Sydney. Split up the State as proposed, however—and the same applies to Queensland, Western Australia, and South Australia—allow private enterprise to build new railways to natural ports and open up unserved country, and our general productivity and progress should be greatly increased and accelerated. There must, of course, be free intercourse between all States, but the details of such an important scheme cannot possibly be dealt with in the scope of a brief note. The principle, we believe, is perfectly sound.

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Mr. Franc B. S. Falkiner, of Haddon Rig, N.S.W., a leading Merino stud breeder, an ex-member of the Federal Parliament—one of the most practical and

South Africa. fearless that ever sat in those "august precincts"—and a member of the Central Wool Committee, recently returned from a trip to South Africa, and gave some interesting impressions. He was particularly struck with the personnel of Parliament, the majority of members being not only independent of their political salaries, but being practical, capable men who, having achieved success in their ordinary walks of life, are prepared in the Legislature to give the country the benefit of their matured judgment and ripe experience. Mr. Falkiner states that the result of leading business men taking part in the government of the country, instead of criticising it from their fireside arm-chairs, is seen in their taxation, which is evidently far more reasonable and equitable than ours. Nobody objects to fair taxation to meet the national expenses, but what is intensely irritating and hinders national progress is taxation inequitably imposed and piled on to meet rank extravagance and waste. This is one of the results of making politics too much of a profession, as we seem to have done in this country. The salary is usually the chief incentive to enter political ranks, not a desire to serve the best interests of the country. Mr. Falkiner said that Australia was undoubtedly the better pastoral country of the two, but the average South African, whether English settler or born in the Union, was of the opinion that Australia was run by men whose political salaries were very essential to their material comfort; that there were too many strikes, and that there was no domestic help for the wives of settlers. And not very far out either!

* * *

After June the various Governments will learn the extent to which their revenues are dependent on prosperity in the pastoral industry. The fall in the value of

Dependence on the stock and meat and by-products is already
Pastoralists. creating a difficult position in Queensland,

and this will be reflected in the income tax returns in the next financial year. The returns from the industry primarily affect the labour market, then the railways, then the shipping. It is stated that one large firm recently had received £150,000 on wool, whereas at the same

time last year it had handled £800,000. Already the absence of stock traffic on the Queensland lines is beginning to affect the revenue, as the movement of stock to the meat works is restricted. Combined with the depression in the mining industry the railway revenue of the northern State will show a great reduction in the next few months. Already the Townsville railway, the most payable in the State, has shown a falling off of 50 per cent. as compared with the same period last year.

* * *

Queensland has supplied several instances of peculiar tactics on the part of the Labour Government and Labour representatives. Only a little while ago the suburban and other railway fares were raised by the Government, and within a few days of an announcement that the fees for certain legal documents were to be raised, the State Government stepped in and vetoed an increase in tramway fares announced by the Tramways Company in Brisbane to combat the great increase in wages and the cost of materials. The company stood alone as the one tramway concern that had not raised fares since the beginning of the war, except for a slight adjustment in July last. Then again expert accountants have found that the Mt. Morgan mine cannot be run at even level cost without 20 per cent. reduction in wages. Accountants appointed to represent the union and the company have borne out that statement. The Arbitration Court president has suggested to the men that it would be well to accept the reduction, but union officials have recommended the men to vote against the proposal on the ground that it is part of a widespread scheme to lower wages. These slant-eyed individuals cannot see that it is part of a world-wide tendency to adopt lower values for copper and minerals.

* * *

There is evidence that the heavy fall in the prices of wool and meat is already affecting the labour market in New Zealand. Although the unemployed problem has not yet become acute, the number of men applying when work is offering has considerably increased. This is due chiefly to the reduction in the number of farm and station hands and to there being fewer men employed on public works, not only by the Government, but by local bodies, the latter being unable to raise loans at the prescribed rate of interest. Labour on dairy farms has not been much affected by the present conditions, as the industry has experienced an excellent season, though the slack time of the year has now begun. In the North Island it is the sheepowners who are feeling the pinch, and in the South Island both sheepowners and agricultural farmers are curtailing employment. The dry autumn that has been experienced throughout the Dominion has hindered cultivation work, otherwise agricultural farmers could have done with a little more labour. Definite action has now been taken in the North Island by sheepfarmers to bring about a reduced scale of wages for farm and station hands in order to meet the very low returns from wool and meat. In Hawkes Bay a large meeting of sheepfarmers agreed upon the following scale:—Crutchers, 4s. per 100; shed hands, 1s. an hour; shepherds, 30s. a week; drovers, 15s. a day; station cooks, 30s. to 40s. a week; cowboys, 20s. to 25s. a week; ploughmen, 40s. a week; station hands, 25s. a week; married couples, £80 to £100 per annum; casual labour, 1s. an hour; harvesters, 1s. 3d. an hour. At Gisborne the Sheepowners' Union discussed wages on the following basis:—Shepherds and station hands, 30s.; head shepherd, £2; married men, £3; drovers, 15s. per day; crutchers, 5s. per 100; shed hands and cooks, 30s.; station cooks, 30s.; cowboys, 20s. to 25s.; married couples, £80 to £100 per year. It was stated that most employees were prepared to accept a reasonable basis. Some were now accepting less than the rates mentioned. So far the Labour unions have not been heard on the matter.

Review of Pastoral Situation.

New South Wales.

SYDNEY, 7th May, 1921.

No general rains have fallen since our last report. A few heavy showers fell in isolated districts, and although they were not absolutely required they did a certain amount of good.

The usual concomitants of a good season, viz., grasshoppers, caterpillars, rabbits, and blowflies, are very much in evidence in many parts of the State, and are demanding the closest attention of pastoralists and agriculturists. Blowflies are particularly bad in many districts, in fact all over the State, with the exception of Southern Riverina and most of the tableland districts.

Pastoral conditions, however, continue to be good throughout the whole of the State, and winter prospects are undoubtedly excellent. Stockowners have no cause to complain of the season, which is exceptionally fine, better in fact than they have had for years; the most serious thing troubling them now is the difficulty in finding a market for their live stock and produce.

The Rural Bank.

The Rural Bank department of the State Savings Bank is now an accomplished fact. It had been promised for some time, and for a while it looked as though the promise would remain unfulfilled, but the Government at last realised that it was one of those promises which could not be ignored. The commissioners of the bank lost no time in formulating the policy to be adopted by the new department.

The object of the Rural Bank is to render financial assistance to primary producers, and particularly to pastoral and agricultural settlers. Advances will be made to new settlers up to a maximum of £500 on the basis of pound for pound on their improvements. The advances are to be repaid by annual instalments of principal and interest. The activity of the Rural Bank will gradually extend, and overdrafts will be granted to persons immediately connected with pastoral, agricultural, or rural pursuits.

The Rabbit Pest.

Rabbits are in evidence more or less in almost all districts of the State. In some places they are in countless thousands, and although the P.P. Boards are enforcing their regulations for compulsory destruction of the pest there does not appear an appreciable diminution in their numbers. During the recent drought the rabbits suffered as much as or more than the sheep and cattle, and millions of them must have died, but it only required a few months of the present good season to restore the pest to its former huge numbers.

One of the most fruitful sources of increase of the pest is to be found in the travelling stock reserves and Crown lands. These are the nurseries for the rabbit and other pests, and until steps are taken to compel the Government to destroy the rabbits on the lands under its control it is unlikely that the trouble will be reduced to any great extent. The P.P. Boards are doing their utmost to combat the evil.

The Inverell P.P. Board has just passed the following resolution:—

"That this board form rabbit destruction associations, each to supervise not more than 30,000 acres, with an honorary inspector for each, the associations to report progress to the board; the board to appoint one month in each year when all land must be poisoned; and that a sub-committee of three members of the board be appointed to manage the destruction of rabbits."

The State Railways.

The Minister for Railways has announced that the Government proposes to introduce during the next session certain amendments to the Railway Act. There appears to be a doubt as to the extent and nature of the proposed amendments, but the Minister has stated that one of the amendments will be

the curtailment of the power of the Chief Commissioner, and another will be provision for the appointment of a fourth commissioner. At present the commission consists of three members.

Although the Minister will not admit it, the general impression is that the desire of the Labour Government is to introduce political control of the railways such as existed years ago. It is not difficult to foresee what this will mean. It is surprising that any Government should think of reverting to the old system, against which so many of our best politicians in the past fought.

The Minister, however, protests against anyone thinking that the Government has any ulterior motive in introducing the amendments, but the people of this State have seen so much Trades Hall coercion of the present Labour Government that they have very little hesitation in concluding that the Labour organisations are behind their puppets in the Ministry in this particular matter.

The Wheat Harvest.

The Government Statistician has just issued his final figures in connection with the 1920-21 wheat harvest.

The actual results disclose that 3,124,370 acres were harvested for grain, yielding 18,468,000 bags, or 34,000 bags above the estimate.

The wheat received at Darling Island shows that the bags contained 2,9086 bushels; therefore the actual harvest represents 53,715,840 bushels, a decrease of 1,586,160 bushels as compared with the January estimate, due to the reduction in the contents of the bag.

The unfavourable weather of December last is reflected in the production of the western slopes division, which suffered most from the wind and rain storm. The central and southern parts of that division show reduced yields as compared with the earlier estimate. In the remainder of the wheat belt the harvest exceeded the estimate.

The highest yield per acre was on the north-western slopes, 1.2 bushels per acre, and the lowest 15.8 bushels per acre on the south-western slopes. The average yield for the whole State, 17.2 bushels per acre, for the current season is the reatest since 1903-4.

The area under hay was 524,680 acres, and the yield 27,290 tons. The average yield for the State was 1.6 tons per acre.

Subdividing New South Wales.

There is considerable activity on the part of the advocates of the creation of new States in New South Wales. The reatest enthusiasm prevails, and those associated with the movement appear to be determined to bring the matter to a successful issue.

At a convention held at Armidale to discuss the whole project, Lieutenant-Colonel Abbott presided, and there were 100 delegates present. In the course of his opening address, Colonel Abbott stated that sixty-five years ago that fine old politician, Dr. Lang, initiated a similar movement for the northern part of this State, and urged the people of that time to insist upon the establishment of an independent State as Queensland and Victoria had done.

The movement in the south for the separation of what is approximately Riverina and east therefrom to the coast is also rapidly gaining momentum. Twofold Bay is claimed to be an ideal port for Riverina, Monaro, the south coast and north-eastern Victoria. The bay is very close to Cape Howe, the turning point of the coastline, where all vessels are compelled to come close in shore. It is of considerable area, and sufficiently deep to give shelter to ships of any draught. The construction of breakwaters for improvement of existing facilities would be a comparatively simple matter, as the contours of the shore and the sea bottom are ideal for the purpose, and suitable stone occurs in great abundance in the adjoining cliffs, though even without breakwaters it is a safe harbour. It is situated about 50 miles from Bombala, the terminus of the nearest railway line, and routes have been discovered by which this comparatively short distance could be traversed by a line with excellent grades all the way. [An interesting letter and a map relative to this question of subdivision into smaller States appear amongst letters to the Editor this month.—Ed.]

Graziers and the A.W.U. Demands.

At the Young branch of the New South Wales Graziers' Association a long discussion arose upon the exorbitant demands of the A.W.U. in respect of shearers and other members of that organisation. It was pointed out that the sooner the graziers of the State combined more strongly and effectively for the protection of their industry the better. It was finally decided that immediate action be taken in this direction, and a number of members handed in their names as being willing, in the event of shearing being held up owing to excessive and unjust demands, to go as shearers or shed hands to any part of the State.

Travelling Stock Routes.

The amending Act which the Government introduced last session in connection with the protection of pastures has now come into force. For years past the P.P. Boards have been clamouring for wider powers to enable them to more effectively carry out their work, and the new Act, while it may not be perfect from the standpoint of the boards, is sufficiently wide in its scope to place the P.P. Boards in an infinitely better position than the old Act did.

Perhaps one of the most important provisions of the new Act is that in connection with the control of the travelling stock routes and reserves. These routes were formerly controlled by the Government, and practically nothing was done to keep them clear of rabbits and other pests. Now, under the board's control, there will be imposed a travelling stock rate which will give the local authorities a substantial sum to enable them to keep the routes clean and to destroy all pests.

It is proposed to charge the following rates for all travelling stock driven over the routes or reserves:—(a) 10d. for each 100 sheep or portion thereof for each 10 miles or portion thereof; (b) 1s. for each 25 head of large stock or portion thereof for 10 miles or portion thereof.

The Act provides that only half of the foregoing rates shall be charged in the following districts:—Berrima, Bombala, Braidwood, Broulee, Casino, Eden, Gloucester, Goulburn, Grafton, Kiama, Maitland, Nepean and Hawkesbury, Picton, Port Macquarie, Sydney, and Tweed-Lismore.

Wild Dogs in the West.

The Minister for Lands is touring the western division, and graziers in that part of the State who have felt and are feeling the full weight of the wild dog curse are putting their case very strongly before him. The remedy is simple and the cost so small that it passes comprehension that there should be any hesitation at all in connection with such a vital matter. If assistance is not forthcoming very soon for the erection of a dog-proof fence there will be only cattle left in all that vast stretch of country west of the Darling, and further than that the Darling itself will not prove a barrier against the further easterly encroachment of the pest. It is to be hoped sincerely that the Minister will regard the problem with open mind and broad national view, and that his visit will result in something practical being done at last.

Live Stock and Produce Markets.

Since last month's report there have been nine sale days at Homebush, during which 171,178 sheep and 22,674 head of cattle changed hands.

The closing quotations were:—Sheep.—Prime Merino wethers to 18s., extra prime to 20s., good to 16s., prime ewes to 14s., extra prime to 16s., crossbred wethers to 20s., extra prime to 21s., good to 14s. Cattle.—Prime heavy bullocks to £16, extra prime to £17, medium to £13, prime cows to £8, extra prime to £10.

Sheepskins are quoted as follows:—Quotations: Merino, full-wools, best, 6½d. to 7¼d. per lb.; ordinary, 5d. to 6d.; medium wools, 4d. to 6d.; short-wools, 2d. to 4d.; pelts, to 1d.; crossbreds, medium to fine quality, full-wools, 2d. to 3½d.; short and medium wools, 1d. to 2½d.; pelts, to 1d.; Lincolns and coarse crossbreds, ½d. to 1¼d.

Hides are quoted as follows:—New South Wales butchers' hides, extra stout, picked heavy-weights, to 18½d. per lb.; heavy-weights (over 52 lbs.), best condition, 6½d. to 8½d.; ordinary, 4½d. to 6d.; medium weights (46 lbs. to 50 lbs.), best, 4½d. to 5½d.; ordinary, 3½d. to 4d.; light medium weights (40 lbs. to 44 lbs.), best, 4¼d. to 5d.; ordinary, 3½d. to 4d.; light-weights (30 lbs. to 38 lbs.), best, 3¼d. to 6½d.; ordinary, 3½d. to 4¼d.; cut hides, 3¼d. to 5d.; faulty hides, 2d. to 4d.; dry hides, to 5¼d.; bulls, to 2½d.; calfskins, to 8s. 4d. each.

Victoria.

MELBOURNE, 9th May, 1921.

It was hoped that the long-delayed break in the season had come last week. For some days welcome showers fell over the metropolitan area, but the reports from the Meteorological Bureau each morning were disappointing, the record showing little to no rain north of the divide, and dry conditions still prevail. However, some useful falls were recorded along the coast, some stations in the Western District aggregating over an inch—Warrnambool, 102 points; Beeac, 104; Birregurra, 107; Colac, 247. The rain will be particularly welcome along the coast, where conditions had become droughty. In some places in the Western District and round Melbourne artificial feeding had been found necessary. April was a very dry month, which is not unusual, but this year the mean rainfall all over the State was exceptionally light. Pastures in the northern and Wimmera areas are holding out well, and a bountiful fall of rain just now should still ensure winter feed. It is getting a bit late for seeding, too, but the wheatgrowers are chary about sowing until the break has come. Conditions and prospects are not too good in the Western District and Gippsland, but the situation has become more hopeful with last week's rains. Mice and rabbits are reported to be on the increase in the Mallee.

Harvest Returns.

The Government Statist has issued his returns for the wheat and oat harvests for the season. In regard to wheat the report shows that for 1920-21 there were 2,295,865 acres under grain, as compared with 1,918,269 in 1919-20, there being an additional 165,502 acres under hay, as against 417,221 for the previous season. The average return per acre for the State was 17.19 bushels to the acre, as against 7.75 the previous year. The total yield was 39,468,625 bushels, as compared with 14,858,380 in 1919-20.

The returns in regard to oats show that for the 1920-21 season 443,636 acres were harvested in comparison with 559,547 for the previous season; there were also 1,140,578 acres cut for hay this season, as against only 681,179. These figures make the total acreage this season 1,584,214, as compared with 1,240,726 for 1919-20. The total yield for 1920-21 was 10,907,191 bushels, compared with 6,603,067 for 1919-20, an average of 24.59 bushels per acre, as against 11.80.

Insurance Against Disease in Stock.

Reference was made in this letter last month to a proposal emanating from the Cranbourne Shire Council to create a compulsory insurance fund against losses of stock by disease. The Farmers' Union have now taken the matter up, and a deputation waited upon the Assistant Minister for Agriculture. It was advocated that a compulsory insurance scheme under the direction of the Department of Agriculture should be introduced, to provide compensation for losses from tuberculosis, anthrax, and pleuro-pneumonia. A tax of 3d. a head should be levied on all stock over twelve months old, and compensation paid on stock destroyed up to three-fourths of its value. For deaths from inoculation on adjoining property, and for contacts killed by order of the Government, full compensation should be paid. It was further suggested that stockowners should furnish a return of all stock on hand on 30th June of each year. The Minister said that the tax would probably have to be more than 3d. a head of cattle. There had been a great diversity of opinion among cattle owners of the State regarding such a fund. He promised, however, that a bill would be submitted to Parliament, when an opportunity would be given to cattle owners and dairymen to consider the scheme and propose amendments.

St. John's Wort.

Mr. Livingston, the Assistant Minister for Agriculture, visited Bright last month to judge for himself the extent of the menace to the country by the spread of St. John's Wort. At a meeting held there he was reported to have severely condemned the Forests Department for the neglect and lack of interest shown in combating the weed, and to

have stated that that state of affairs would be remedied. The Railways Department, Mr. Livingston was also reported to have stated, was little better, and required to be "shaken up" as well. If all the departments concerned worked together much good would result. After viewing the weed in the Beechworth district, he said he thought the task of eradication was easy, but on coming to the Bright end he realised that the problem was of extraordinary magnitude, and unless grappled with thoroughly the whole State would be quickly menaced.

A preliminary investigation of the problem as affecting Crown lands was subsequently decided upon by the Government. A sub-committee of the Cabinet—the Minister of Lands (Mr. Oman), the Minister of Public Works (Mr. Clarke), and the Assistant Minister of Agriculture (Mr. Livingston)—has been appointed to prepare a report on proposed measures to be taken.

Crown Lands for Repatriation.

The action of the Ministry in purchasing so much private-owned property for repatriation when there are such large areas of unoccupied land in the north-western mallee, the Murray Valley, and other parts of the State, is generally condemned. There are approximately four million acres of Crown land in the north-western section of the State still unused. Any number of settlers in that district obtained yields of nine bags per acre last harvest, and several returned soldiers have paid off the total cost of their blocks from the profits of the 1920-21 crop. There is comparatively little settlement along the Murray bank from Swan Hill to the South Australian border, yet it is capable of supporting the total population of the State.

Since Mr. Angus became Assistant Minister for Lands he has directed special attention to utilisation of Crown lands for repatriation, and it is to be hoped that the purchase of private property will ease off considerably.

Live Stock Markets.

Since last issue four sales have been held at Newmarket, with a total offering of 126,290 sheep, 43,540 lambs, and 10,800 cattle, as against 119,010 sheep, 46,120 lambs, and 10,160 cattle for the previous month.

The following are the prices at the sales held on the 4th and 5th inst.:—Prime crossbred wethers, 22s. to 25s.; prime crossbred ewes, 19s. to 21s.; prime Merino wethers, 21s. to 24s.; prime lambs, 21s. to 23s.; good lambs, 17s. to 20s.; prime pens of bullocks, £18 to £19 5s.; good pens of bullocks, £14 10s. to £17 10s.; prime pens of cows, £13 to £15.

Notes.

The Department of Agriculture has made arrangements for holding instructional classes for factory managers, foremen, graders, testers, factory hands and farmers in the production and handling of milk and its products. The classes will begin in Melbourne on 24th May, and continue for a fortnight.

The stock judging competition at the Royal Show is attracting the attention of breeders. Messrs. Lyon and Kerr have offered a Jersey bull calf to the competitor who obtains the most points in the Jersey class.

A committee meeting of the Victorian division of the New Settlers' League was held in Melbourne on 27th April. It was decided that the mayor or president of all country municipalities should be asked to take up the movement and form branches in their districts. The first four country branches to be formed will be at Ballarat, Bendigo, Geelong, and Warrnambool. Part of the duties of the league will be the care of the welfare of immigrants who intend to go into the country.

Queensland.

BRISBANE, 7th May, 1921.

SOUTHERN.

The weather during the month has been typical of that of the previous month—plenty of rain in the coastal region and a fair amount in the western districts, but none in the tract south from the Peninsula (back from the coast) down to the Darling Downs. A feature of the position on the Downs has been the good falls at the Toowoomba end, and lesser precipitation at the Warwick and Stanthorpe end, with

the utter absence of rain in the central and south-western parts, extending out to Dalby and Tara and Goondiwindi, where the conditions are practically drought-stricken. From this central belt of the Downs stock have had to be moved for relief. At the Toowoomba end the country is like a garden, as the result of 327 points of rain during the month following on previous good falls. On the other hand, Talwood and Tara had no rain, and Miles and Dalby had only about 15 points. Out towards Roma and in the Murilla there has been no rain, but the country below the range and all the coastal belt and the Burnett and Wide Bay are in splendid condition. The southern sugar districts have been well served. Bundaberg had nearly nine inches, and Nambour 11½ inches. In the south-eastern part rain fell on a third of the days. The Maranoa district, as indicated, remained dry, but out beyond, in the south-west, some good falls were recorded. Cunnamulla and Thargomindah were especially favoured. (A correspondent in those parts writes us:—"Pleased to report a most wonderful season in this locality, the best for many years. Rainfall from 1st January to 30th April, 955 points. Labour troubles very quiet now in this district. A good number of unemployed are walking about in quest of work, but cannot get it. Most of them begging rations."—Ed.) In the Burnett district plenty of grass is available, while the lucerne crops are luxuriant. This district contributes about one-third the total quantity of maize raised in the State, and although the dry weather of two months ago greatly affected the prospects a fair crop will be reaped from an increased area planted. The Primary Products Company of Victoria, which purchased nearly 3000 acres of land some time ago, has 1350 acres under crop, and expects a yield of 10,000 bags. The land is being cultivated on the most modern methods, with tractors running the whole 24 hours.

Co-operative Works.

Desultory discussions have been taking place concerning the establishment of co-operative stock treatment works now that the prices for stock have gone to pieces. Nothing seems likely to come of these. One correspondent has made the definite proposal that the cattle men should take shares in the Murrarie Co-operative Bacon Factory, add freezing chambers and canning works, and start the treatment of stock there.

A.W.U. Claims.

The A.W.U. has lodged another claim before the Arbitration Court for an award covering shearers, station hands, shed hands and wool classers, and in addition a claim for the employees of proprietary wool scourers. The claims are higher than those lodged in the Federal Court. The date for hearing is 16th May, but a compulsory conference has been called for 9th May to settle a number of the questions.

Wheat.

For the first time in its history Queensland is exporting wheat. Already a large quantity has been despatched overseas, but some of the boats arranged for have been cancelled. Millers in Queensland complain that the price at which wheat is available does not enable them to compete with millers in other States, who are supplying North Queensland.

Soldier Settlers.

The number of soldiers placed on the land in Queensland is 2488, settled on 676,000 acres. The State Government has advanced £2,139,000 for soldier settlements. The Minister for Lands is seeking to get the consent of the Federal Government to an increase from £625 to £700 to settlers to tide them over a difficult period, and to enable those in the principal settlements to pay for fertilisers.

Unemployment.

Reports from the western districts show that many men are out of work. Outside Charleville a large number are camped. This is the result of the slump in the prices of stock on top of the high awards; graziers cannot afford to face the expenditure. It has been suggested that some of the men favour approaching the Arbitration Court to get the wages reduced. The position is expected to become worse when the shearing is finished.

The Dingo Act.

Following recent inquiries by the United Graziers' Association a deputation waited on the Minister for Agriculture to suggest an amendment of the Dingo and Marsupial Act, pointing out that the bonus system has been a total failure, and should be eliminated from the Act, that the whole of the State should be brought under the Act, that a central board consisting of stockowners be created, that a uniform assessment be levied throughout the State, the Government also to be assessed as stockowners, that the killing of dingoes be compulsory on all landowners, that universal compulsory poisoning be instituted, that lessees who fence properly be granted an extension of lease. The Minister promised consideration of the requests. He did not accept all of them, but seemed favourably disposed towards the proposal that the whole State should be asked to bear the burden, and not certain districts only. To make the killing of dingoes compulsory might prevent the taking up of the poorer land, he feared. He did not quite favour giving an extension of lease for dog netting, but favoured the idea of a central board. He was non-committal as to whether the bonus system has proved a failure.

Irrigation in the West.

Officers of the Water Supply Department have been visiting the St. George district to inspect the Balonne River in respect to a proposal to build a series of weirs between Warwick and St. George for the purpose of conserving sufficient water to irrigate 50,000 acres of land near St. George. The engineers are said to have stated that the scheme can be carried out inexpensively. In view of the tightness of the money market it will be surprising if money can be found for this or any other scheme of irrigation.

Bird Pests.

The Flying Fox and Bird Pests Destruction Board has pointed out to the Home Secretary the need for the extension of the boundaries of boards to cover the whole State, owing to flying foxes being driven out of board districts to breed up in districts where the boards do not operate. Crows again are regarded with a friendly eye in sugar districts, but are a pest in fruit-growing districts. The starling is also being allowed to multiply in districts where there are no boards. The Minister favoured extension of the operations of the boards, with provision to suspend them where necessary.

Notes.

The Government plant has commenced the ginning of cotton, of which there will be a fairly large crop this season. The Government supplied the farmers with seed and paid them 5½d. per lb. for the seed cotton on the farm. Any balance after cost of treatment and marketing will be handed over to the suppliers. A certain amount of seed will be retained, and the balance sold to manufacturers of oil cake. At present market prices for the lint it seems doubtful whether the department will realise the amount advanced.

Already the council of the Royal National Association is organising what is expected to be a record show in August. Eight districts have notified that they intend to send in collections, while two districts have not yet decided. The prize money will be £1000 more than last year. A massed display of 1000 cases of fruit has been arranged. A new exhibition hall is projected.

Recently in the saleyards at Brisbane cattle from Brunette Downs, Northern Territory, were sold. By rail or on the hoof they had travelled 2000 miles. They were fattened on Mr. A. J. Cotton's Hidden Vale Station.

No further spread of ticks on the Darling Downs has taken place so far. The cattle on the affected areas, which have been quarantined, are being treated constantly. The localities affected are Dalby, Clifton, and Tummaville.

The latest sale of hides was better in tone than any sale for some time past. Exporters operated freely for hides of from 33 lbs. to 46 lbs., and there was also inquiry for medium and heavies. Best hides sold to 4d., and medium and heavies to 5d. The market for sheepskins was dead.

A conference recently took place at Tweed Heads regarding the proposal of the New South Wales Government to move the tick line into Queensland territory, so as to throw the town of Coolangatta into direct communication with Tweed Heads, at present on the other side of the tick line. Queensland officers and representatives of Coolangatta expressed a preference to have the tick line at the Tweed River, but this is opposed by New South Wales, which is prepared to erect the new fence and undertake all obligations. A proposal is to be submitted to the Queensland Government.

Live Stock Markets.

Four sales were held at Enoggera during the month of April, a total of 31,100 sheep, 2560 lambs, 5600 cattle, and 530 calves being

sold. The latest quotations are:—Three-quarter to full-woolled Merino wethers, 10s. to 14s. 9d.; half-woolled Merino wethers, 7s. 9d. to 13s.; quarter-woolled Merino wethers, 6s. to 11s. 9d.; full-woolled crossbred wethers, 12s. to 15s.; half-woolled crossbred wethers, 12s. 9d. to 16s.; short-woolled crossbred wethers, 7s. to 13s. 9d.; three-quarter to full-woolled crossbred ewes, 8s. 9d. to 13s.; prime lambs, 13s. to 14s. 3d.; good lambs, 10s. 6d. to 12s. 6d.; light lambs, 7s. to 9s.; prime bullocks, £10 5s. to £12 5s.; good bullocks, £8 to £10; light bullocks, £6 to £7 10s.; prime cows, £5 10s. to £6 15s.; good cows, £4 to £5; light cows, £2 10s. to £3 10s.; calves, vealers, and weaners, 7s. to 40s.

CENTRAL.

The rainfalls in the coastal belt were patchy, but the sugar districts fared well. The falls were best at the extreme upper and lower ends; in the middle coastal belt the records were lower. In the middle west the falls were very light, but on the outer edges they got higher, though in no places were they very high. Windorah enjoyed $2\frac{1}{2}$ inches; that was the best record. Generally, the conditions are good, and the winter has no terrors for graziers.

Blowflies.

During the wet spell blowflies were very active in the central west, especially around Blackall. The demand for dip has increased, and this means of checking the fly is being resorted to freely. On one holding, it was said, the percentage of stock struck was 50. The colder weather is expected to check the fly.

Mt. Morgan Mine.

One of the most distressing phases of the industrial distress during the month was the intimation of the directors of the Mt. Morgan mine that unless there was a reduction of 20 per cent. in the wages the mine must close, as it was unprofitable to work it at the present price of copper. The President of the Arbitration Court, to whom the matter was remitted by the unions, caused two accountants to be appointed, one representing the unions, and the other the company. Their report was to the effect that a saving of 24.8 per cent. was essential to prevent running the mine at a loss. This bore out the company's estimate of 25 per cent. saving, the difference being represented by indirect savings and reduction in directors' fees, &c. The matter is the subject of a ballot. The Arbitration President has suggested the adoption of the proposal, but the union representatives are against acceptance on the ground that it is the thin end of the wedge for a general reduction. (The Mt. Morgan miners turned down by 179 votes the proposal to accept a reduction of 20 per cent. in wages.—Ed.)

Notes.

A man at Rockhampton was fined £5, or 14 days' imprisonment, for cruelty to calves, by tying a strap round their heads and chains round their legs to keep them away from their mothers.

The value of the aeroplane in the western country has been already proved in the case of sales of stock at a time when motor cars cannot travel. Now we have the case of a mother and child being brought into a hospital by aeroplane. Iandra is a sheep station, 32 miles from Longreach. The infant daughter of the manager, Mr. A. W. Jolliffe, became seriously ill, and an aeroplane was sent out by the Queensland and Northern Territory Aerial Services Limited, the outward trip taking 30 minutes, and the return journey only 20 minutes. The roads were so bad that motor cars could not have travelled.

NORTHERN.

The Peninsula was well served with rain, the falls aggregating over 10 inches for the month in most places. The coastal belt, including Cairns and Innisfail, had exceptionally heavy rain, upwards of 20 inches being notched by the two centres named. Mackay, on the other hand, had only the moderate total of 320 points. The Atherton tableland was well favoured with $11\frac{1}{2}$ inches. The Carpentaria was well supplied with rain, though the falls varied from over 10 inches to 33 points. Round about Cloncurry there were fair records, but on the border the totals were less.

The Sugar Industry.

The splendid rains in all the sugar districts have greatly improved the prospects of the coming sugar crop, which is expected to produce well up to 300,000 tons of sugar. This will be enough for the requirements of the Commonwealth. In one of the districts very heavy rains have fallen, though

in the later stages of last month the weather was more settled.

In the sugar districts meetings are being held to combat the agitation in the other States for a reduction in the price of sugar. It is proposed to bring the facts under the notice of various public bodies and others in all parts of Australia.

Lawlessness in the West.

The Protection Association formed by pastoralists has not succeeded in wholly eradicating lawlessness in the Cloncurry district. Two men visited Westbank Station, owned by Mr. E. Jowett, on the Corella River, 28 miles from Cloncurry, molested the wife of the manager, who is old, and stole a sum of money. This was one of the worst cases so far reported. It is announced that at Charleville the Pastoralists' Association proposes to form a prosecution body in respect to stock cases.

Maize.

The output of maize from the Atherton district is expected to reach considerably over a million bushels. The Minister is considering proposals for erecting drying and storing premises, or a factory for the manufacture of maize products. The latter is out of the question owing to its cost, £170,000.

Horse Flesh.

The Northern Graziers' Association recently asked the Canadian Government to what extent horse flesh is utilised. A reply has been received that the industry has not been carried on there; some districts might have carried it on to a small extent, if at all. Some years ago there was some talk of finding a market in Europe for surplus horses, but nothing ever came of it.

Notes.

The dispute in the State meat shops at Townsville has been settled by the Department giving preference to all employees, except the one over whom the dispute arose, whose case has been referred to the disputes committee. The employees will receive free meat as before. The shops had been closed for months as a result of this dispute.

Recently through the agency of Messrs. Chapman and Snelling, Brisbane, 3000 head of station-bred cattle were sold by Tarbrax Station, Hughenden, owned by the Australian Stock Breeders' Company, to the Cluny Pastoral Company.

South Australia.

ADELAIDE, 7th May, 1921.

Following upon the good rains reported a month ago the weather took a turn back to summer conditions, and April finished up with congenial autumn weather, while May came in with distinctly summer heat. For two successive days record heat was established for the month of May. At the time of writing high barometers prevail, and it looks as if a definite break in the weather is not close at hand. It must be remembered, however, that the country is in excellent heart everywhere owing to the heavy summer rains, and although agriculturists would like to push on with their seeding operations a little faster than is at present possible; there is no immediate cause for apprehension.

Mr. T. H. Pearce, a well-known pastoralist, has just returned from a visit to the far north, and he describes the country throughout his travels as being better than anything he has seen in his forty years' experience. Stock are prime everywhere, and a number of new grasses have made their appearance as the result of 10 inches of rain since Christmas on top of 18 inches in 1920. He adds:—"I hardly know how to describe the country, as it looks so well. Prairie grass is growing from 4 ft. to 5 ft. high, and miles upon miles of Sturt peas are in full bloom, making the landscape a perfect picture." Mr. Pearce states that pastoralists are showing considerable activity in making provision for water, and complimented the legislators of South Australia in having provided pastoral legislation which gave lessees such security of tenure that they were encouraged to spend money in the country.

There is a large area of land under fallow, and the general impression is that the average area will be put under wheat this season. Something like 70,000 tons of superphosphates have been transported into the country during the last few weeks, and the railways report that the quantity moved during April constitutes a record. Farmers generally have done well as the result of the good harvests and the high prices obtained for grain.

Agricultural Conference.

An important Interstate Agricultural Conference opens in Adelaide next week. This will be the first of its kind held since 1914. Representatives will be present from all the States of the Commonwealth. The agenda paper contains propositions on sixty different subjects, including bulk handling, pure seed legislation, pure-bred sheep, uniform stock and stock diseases legislation, herd testing, State control of dairy factories and butter export, interstate trade in dairy produce, refrigerated space for interstate produce trade, reduced freight for refrigerated produce, export market for orchard products, markets for peaches and citrus fruits, standards for jams and preserved fruits, improved methods of distributing fruits and vegetables, and interstate trade statistics.

State Politics.

The general elections for the State Houses of Parliament, held on 9th April, resulted in a sweeping victory for the Liberal Party. The result was that in a House of 46 the Labour Party came back with 16, the Liberals gaining 28 directly pledged to support the Ministry, while the remaining 2, although not elected by the support of the Liberal Party, will stand behind the Ministry generally and vote with it if attacked by the Labour opposition. On any vital division, therefore, with a Liberal Speaker in the chair, the vote would be 29 to 16, which represents the largest majority enjoyed by any Ministry in South Australia for a great number of years. The position in the Legislative Council, which is an elective chamber on the broadest franchise of any second chamber in Australia, is equally satisfactory, there being only four Socialists in a House of 20. The Government has indulged in no heroics as to what they propose to do, but they have promised steady administration with no pretence of being political magicians. Consequently, the net result of the elections has been a great steadying influence in financial and producing circles. The threat of the Labour Party that if returned they would give special attention to "pastoral leases" no longer troubles the men who in face of many difficulties are seeking to develop the country.

Grain Shipments.

Large quantities of grain continue to flow towards the seaboard, and shipments continue on a particularly heavy scale. It is expected that before the new wheat begins to come in there will be very little grain left in the country to carry over, so that another favourable opportunity should be presented to clean up the compulsory pool. There is a strong feeling that if there is to be any further pooling it must be voluntary, the producer having extended to him the right of handling his produce in his own way.

Live Stock Markets.

During the month prices for cattle and sheep experienced a sharp decline, and rates all round show much easier markets. At the last sale 1140 cattle were yarded, and 10,260 sheep. Quotations are now on the following basis:—Prime bullocks £12 to £15, good £10 to £12; prime cows £9 to £11, good £6 to £8; prime Merino wethers £1 4s. to £1 8s., good £1 1s. to £1 4s.; prime Merino ewes £1 to £1 3s., good 15s. 6d. to 20s.; prime crossbred wethers £1 3s. 6d. to £1 7s., good £1 0s. 6d. to £1 3s.; prime crossbred ewes £1 to £1 2s., good 15s. to 20s.; prime lambs £1 3s. to £1 6s., good £1 to £1 3s.

General.

A charge of sheep stealing has been preferred against two well-known graziers in the hills district, and some sensational evidence has been given in the preliminary hearings of the case. The accused have been committed for trial, when no doubt the evidence for and against them will attract considerable attention in stock circles.

Another fine supply of water has been struck on Koonamore Station, in the north-east, at a spot indicated by the divining rod.

Western Australia.

PERTH, 30th April, 1921.

The weather for April has been dry. The last general rain in the pastoral areas of the north-west was between 7th and 21st March, when nearly all the stations near the coast in the north-west from Wyndham down to Shark's Bay received more or less rain, and some places very generous visitations, and the conditions there are good. As the depression came south it gave light rains over the agricultural areas, but not enough to fill dams. In many cases it was not heavy enough to start the feed, and where it did do so, not enough to saturate the ground to render the benefit permanent. Since then the great north and north-west has been practically rainless. On 14th April, and again on 19th April, a depression struck the Leeuwin, and gave light but useful rains in the south-west. These, however, did not extend far into the wheat belt. The summer has been exceptionally dry, chiefly because the rains stopped a month earlier than usual. There has been no good general rain since September.—(Since the above was written splendid and almost general rains from the De Grey southwards have fallen. Nullagine has had 1½ inches, Mundiwindi an inch, Peak Hill 1½ inches, and coming further south the totals ranged up to 2 and 3 inches from the coast east to the goldfields. Further east, however, in the Eucla division, the rain has not yet, unfortunately, penetrated. It is very dry out that way.—Ed.)

It is not understood as well as it should be that the rainfall of Western Australia is governed by two fairly distinct sets of factors. In the north and north-west, where the country is practically entirely devoted to the pastoral industry, the settler depends for his rain on the monsoonal disturbances in the summer time. If rain does not come between December and April there is usually not much chance of any occurring during the remainder of the year. The south-west, on the other hand, is governed by entirely different conditions. It has probably the most uniform climate of any part of Australia. The season may be divided into a period of seven rainy months, from April to October, and the dry season of five months, from November to March. Sometimes practically no rain at all falls during these five months, and on the average, taking the whole area from the Murchison to the south coast, about 90 per cent. of the rain falls during the seven cooler months of the year; at Northampton 94 per cent. of the total rainfall falls in winter, and at Perth 92 per cent. Good winter rains have never been known to fail during this period, excepting in 1914, and that year, curiously enough, the south-west was visited by summer rains, so that although the crops failed for want of rain in the winter, the rainfall records do not show very pronounced indications of a drought; in fact, taking the year on the whole, it was not a drought, and there was never less trouble about water shortage than in the summer of 1914-15.

Taking the south-west as extending from the Murchison River to the south coast, and from the west coast eastward, we find that the rainfall steadily decreases from the north to the south and from the west to the east without materially interfering with the normal proportional winter and summer distribution. The occurrence of inland local thunderstorms increases the summer percentage somewhat, but this condition does not usually materially affect the average in the wheat belt. This concentration of the rain over the cool growing season of the year is a governing factor in connection with both agricultural and grazing work in the south-west, and the troublesome fact is that the interests of the farmer in regard to the growth of crops is often more or less opposed to his interest from a grazing point of view. Summer rains, and particularly early autumn rains, say, in March and April, are most desirable from a stock point of view, because they give early feed and plentiful supply of water. Such early rains have, however, not proved to be favourable for heavy yields of cereal crops. It has been found by a study of the seasons over a long period that it is not the early rains, but the later rains in September and October which govern the yield of wheat, barley and oats. The early rains give a heavy growth of straw, but if these are not followed up by the late rains, and the season cuts off short, then the grain does not fill out, and the yields are disappointing. So far as grain growing is concerned, the

farmer has no need to worry if the rains do not occur before the end of May, but from a stock point of view the holding off of the rains until this late period is a serious matter.

As the development of the sheep industry in the farming districts of the south-west and the wheat belt has made enormous strides in the last ten years, and particularly in recent years, the farmer is increasingly anxious with regard to the rains coming early. In addition, in the more recently settled districts, the farmers have not yet made proper provision for the conservation of water, and at the present time, many farmers are carting water when they should be engaged in other more profitable occupations.

Before leaving this question of the weather, special reference should be made to the belt of country known as the Lower, Middle and Upper Murchison. This country, like the eastern goldfields, depends partly on summer rains and partly on winter rains; the valuable rains, however, come in the winter. The summer rains are good if they are heavy enough, but it has been the absence of the winter rains for the last two winters which has brought about the serious condition of these districts from a stock point of view. There is no serious water trouble, and much of the country is provided with good top feed, but the absence of rain has played havoc with the lambing, and it must be admitted that these districts are in a far from satisfactory condition, excepting in isolated places. This fact has had an important bearing upon the metropolitan stock market.

The Shearing Dispute.

No settlement has been arrived at in connection with the dispute between the Pastoralists' Association of Western Australia and the A.W.U. over the rates of wages and working conditions to apply to shearers during the 1921 season. In fact, a deadlock has been reached, and it has been authoritatively and definitely announced by the association that no shearing is to be carried out except under the 1920 rates. This decision applies to all stations south of the De Grey River, the few growers north therefrom being exempted on the grounds that the climatic conditions are such that the wool cannot, for the sake of the sheep, be allowed to attain more than twelve months' growth. The rise in the cost of running a station in W.A. during the period 1914-1920 is strikingly indicated in the following table prepared by the Pastoralists' Association, the figures being those of a station carrying 30,000 sheep, yielding 600 bales, or 100 tons of wool:—

	1914.	1920.
Shearing	£686	£1,172
Wool freights and charges ..	1,120	2,283
Station hands	1,451	2,285
Rents	393	1,062
	£3,650	£6,802

All classes of station labour have received large increases in wages during the last few years, and they could be borne, as growers had a ready and remunerative market for their produce. Now, however, that the bottom has fallen out, further heavy increases cannot possibly be paid.

Nor-west Cattle Trade.

The first ships bringing cattle from the north-west have arrived at Fremantle, and during the past week some 600 or 700 were offered for sale. It is anticipated that during the season, from now on to October, when the season ends, the shipments of cattle from the north-west will be heavier than in any year during the past seven years at least. If the boats run according to programme there will probably be 20,000 north-west ship cattle to be sold at Robb's Jetty, Fremantle. Under this influence the price of beef is bound to ease during the coming winter, and as the supply will be heavy, and it is quite possible that the later shipments will not be fully up to standard, the price of store cattle should ease. In all probability some of the later shipments will have to be sold to graziers to be fattened in the midland and more southern districts. The freights are said to range from £5 and £6 per head, and with charges the cost of marketing the cattle will probably be about £8 10s. per head.

Live Stock Markets.

The long, dry summer and the shortage of water has forced a good many farmers and southern graziers to put

large numbers of sheep of medium quality on the metropolitan market. Bush fires have also caused considerable ravages, and this has had its influence. During the month the price of best quality beef has declined; at the beginning of April good quality medium weight beef sold at 72s. 6d. per 100 lbs., and towards the end of the month it had declined to 50s. per 100 lbs. The price of sheep has also eased, and on the 21st April best crossbred wethers were quoted at from 24s. to 27s., and Merino wethers from 24s. to 26s. Pigs have been in short supply, and medium baconers have sold from £5 to £5 15s. per head. These figures are for the good stuff. There has been the usual "tail" sold at much lower prices.

Tasmania.

LAUNCESTON, 6th May, 1921.

April was another month of moderate rainfall throughout Tasmania, and in the midlands and south the fall was very much below the average. This month has opened with wetter conditions, but the rains are of the light and frequent order more than the thorough soaking variety that has been so much needed. In parts of southern Tasmania water has to be carted long distances for domestic purposes. This singular experience at this time of the year indicates the dryness of the season, particularly in the southern and central parts.

It was not until late in April that the ground in the main agricultural areas became soft enough for cultivation. Since then work has been pushed on rapidly, but sowing is all behind, and rarely has it been later than it has been this year. Unless the early winter is unusually dry, the area to be seeded must be restricted. The Algerians that were sown early, but made little headway until the rain came, are now coming on rapidly, but there will not be the crops for feeding off that are usually available.

Though pastures are short, the young grass is making good growth, especially in the north. Temperatures have been fairly mild, with occasional cold snaps and snow in the higher country, and the outlook for winter feed is fair. For one thing there will be plenty of hay and straw in the country to meet any pinch. Stock have held their condition well. The store stock market has been very slack, but it is expected that after the late rains there will be a revival in competition. Young ewes and wethers have been in most demand, but there has been a weakening tendency with store lambs. In fact, caution has been the dominating factor with buyers all round. Milch cows and calves are in great demand, and are bringing high prices.

There are ample supplies of fat stock, and the recent low level of prices looks like operating for some time.

Coast Disease in Cattle.

Some attention is now being given by the Stock Department to the coast disease in cattle on King Island. Samples of soil and lime from the island have been analysed by the Government agricultural chemist, and the results and a general report have been forwarded to the United States Agricultural Department in the hope that the experience in that country will throw some light on the trouble here. No reply has yet been received from America. It has been suggested in King Island that iron bearing sand from the interior should be distributed along the coastal areas, in view of the fact that a change of pasture improves the trouble, but this scheme is not regarded as practicable.

Swamp Grass.

An effort is being made to establish the *Poa Aquatica* swamp grass in Tasmania. There are large submerged areas in this State which could be put to much better purpose than at present. Where this grass has been tried in the Circular Head district cattle have shown a keen partiality for it.

The Wool Position.

Sheep owners in Tasmania are in favour of the movement that is being made to stabilise the wool position. On behalf of the Tasmanian Farmers' and Stockowners' Association all

the Tasmanian members of the Federal Parliament have been asked to support the Bawra scheme.

Grass Seed.

Owing to the high cost much less grass seed is being sown in this State than is customary. As a result the development of the newer districts will be retarded. In King Island there are bitter complaints about the damage done to the young grass by kangaroo and wallaby, and some owners decline to expend money on grass seed for the marsupials to destroy the young shoots.

New Zealand.

(FROM OUR OWN CORRESPONDENT.)

CHRISTCHURCH, 1st May, 1921.

AUCKLAND.

There have been some good falls of rain during the past month, and although it has come rather late, the beneficial effect of the change in the weather is already evident. Provided that there is an absence of frosts there should be a fair growth before winter really sets in. The stock markets are very dull, even dairy cows not yet being in demand for next season.

Record Dairy Season.

The dairy season now about to close was a record one for the Auckland province. Butter received at the grading stores to the end of March totalled 704,020 boxes, compared with 425,970 boxes received to the end of March 1920, an increase of 278,050. The export value of the butter received to the end of March shows a very large increase compared with the figures of the corresponding period of the previous season, being £4,928,140, as against £1,927,514, an increase of £3,000,626. The value of butter per box this season under the agreement with the Imperial authorities is £7, as against £4 10s. 6d. last season.

Fat Stock Prices.

There has been a further drop in the prices of fat stock at Auckland, and beef is now down to 38s. for extra choice, and to 30s. to 36s. for prime per 100 lbs., while prime young cow and heifer beef is selling at 22s. 6d. to 32s. 6d. per 100 lbs. Prime wethers are selling at 16s. to 22s. 6d., extra prime heavy ewes 14s. to 16s., best lambs 15s. to 18s., and lighter 12s. to 14s. 6d.

TARANAKI.

The weather during the month has been on the cold side, and although there has been a lot of rain there has been very little growth, and feed prospects for the winter, so far as the pastures are concerned, are none too good.

Noxious Weeds.

There being only a small proportion of Taranaki lands under cultivation, it nearly all having been sown down without breaking up, noxious weeds are spreading, and are therefore difficult to eradicate. The county councils are taking the matter up, and the Egmont Council resolved that the Government be requested to have all noxious weeds in the county eradicated through their inspectors, the council to particularly draw attention to the state of the Maori lands in the county, and that the Government be asked to take immediate steps to prevent the sale of grass seed and other seed adulterated with the seed of noxious weeds.

HAWKES BAY.

Farmers and graziers have had a very trying time during the month. They have not only had to face the low markets for wool and meat, but have to carry their unsaleable stock on bare pastures. Owing to the very light rainfall since the new year there has been no growth of grass, and consequently feed has become very scarce over the greater part of the province. To make matters worse, grass and bush fires have destroyed a lot of feed, besides doing other damage. The southern part of the province has had a little more rain, and as this part is more largely given over to dairying the low markets mentioned have not affected the farmers, except that their store cattle are very low in

price. The position so far as the winter is concerned would be greatly improved with a good rain, as the warmth of the soil would promote a good growth of grass.

Keeping Down Rabbits.

In no district in New Zealand is so much successful effort being made to keep down rabbits as in Poverty Bay, where the East Coast Rabbit Board is a live body. The position of the east coast in regard to the rabbit pest is, perhaps, phenomenal. Only a few years ago rabbits were as plentiful there as in most parts of the Dominion, but at the present time it is cause for remark if even a single rabbit is seen anywhere except right in the back country. The fact that a large number of the board's employees can only catch 45 in a month proves this fact, and the actions of the East Coast Board are such as might well be followed in other districts. The East Coast Board control a district extending from Opotiki to Wairoa, and it is only by systematic organisation that it has met with such success.

A Serious Charge Against a Breeder.

A special meeting of the Council of the Aberdeen-Angus Cattle Breeders' Association, held at Hastings recently, discussed the action of a member in altering calving dates on three official pedigree certificates of imported cattle. It was unanimously decided that the principal agricultural and pastoral societies of the Dominion be informed of the circumstances, and that the council recommend to the societies that none of the beasts in question be allowed to compete or exhibit in any show ring in the Dominion for, say, three years. It was also resolved that membership of the association of the member concerned should be suspended pending the receipt of a report from the Home authorities as to whether this suspension should last for a fixed period, say, five years, or whether the member should be disqualified for life.

WELLINGTON.

Although there have been falls of rain in most of the country districts, especially along the west coast, by which pastures have been refreshed, there has not been nearly sufficient to meet requirements. The temperature has appreciably lowered, and frosts inland and on the higher country have been recorded, and this has checked the growth of grass. There is an opinion growing that prices for fat stock must increase during the winter, as owing to the dry season, and the number of stock that has to be held, there will be few fats available. This view is applicable to most districts in the North Island. Among the many troubles that farmers now have to meet are the new Government land valuations, based on the recent boom prices. The Government declined to hold over these valuations, and it is therefore likely that the Assessment Courts will have months of work before them, as in some districts, especially where sheep are mainly kept, more than half the landowners are likely to lodge objections.

Destruction of Calves.

The results of an investigation carried out recently by the stock inspectors of the Department of Agriculture with a view to ascertaining the percentage of calves destroyed in various districts form the subject of an interesting note in the March number of the "Journal of Agriculture." In the Auckland province the destruction was estimated at an average of 57 per cent. in the districts where dairying is the principal industry, and at an average of 12 per cent. in the districts where grazing predominates, and the figures for other parts of the Dominion are similar. In one of the centres the percentages of slaughters go up as high as 90 and 95. The loss of so many calves must have an important bearing upon the cattle stocks of the Dominion in the near future. Another matter is that on account of the dry season and the high value of dairy products the calves reared (mostly heifers) have in the majority of cases been badly done by.

Shearing Rates.

It is reported that the sheepowners of the North Island will act with those of the South Island in any proceedings that may be necessary in fixing the price for shearing next season. Two months ago the Canterbury owners held a conference with the men, but the views of the parties were separated by so wide a gulf that no agreement was reached. The owners are now applying to the Arbitration Court for an award.

Losses on Sheep.

The newspapers are freely quoting instances of losses made by individual farmers and others on sheep, and there is no doubt that the position of many men on the land is very serious. Just before the slump in prices a large sheep farmer held 10,000 fat wethers, for which he was offered 30s. per head, but he refused to deal at less than £2. He still has the sheep, which are said to be now worth only 7s. 6d. per head. In this case there was, however, a want of judgment. It is rumoured that several large forward buyers of sheep in the North Island have struck serious financial trouble. One speculator is reported to have—or had—on hand over 100,000 sheep, bought forward when "the sun was shining," i.e., at top prices. These sheep have dropped in value by fully £1 a head, and there are not a great number of speculators who can withstand a "bump" of over £100,000. In Marlborough a proposal was made, which dealers resented, that on contracts for forward delivery a deposit of 50 per cent. should be paid. Those who have feed cannot very well go wrong at present prices.

Retail Price of Meat.

At a conference between the Prices Investigation Tribunal and a committee of the Christchurch Master Butchers' Association, a schedule of prices for prime quality beef, veal and mutton, sold over the counter, was agreed upon. Among the items are steak 7d. to 11d., sirloin 8½d., corned beef 5d. to 8½d., gravy beef 4d. to 6d., sausages 5d. to 6d., tripe 8d., suet 5d., legs of mutton 8d. to 8½d., shoulders 5d. to 6d., loins 5½d. to 7d., loin chops 8d., other chops 4d. to 6d., cutlets 10d., side 5d., hindquarter 6d., forequarter 4d., fillets of veal 6d. to 8d., loins 5d. to 7½d., cutlets 8d. to 9d. It was agreed that second quality beef and ewe mutton should range at least 1d. per lb. lower, and that 1d. per lb. would be a reasonable charge for delivery and for booking and delivery.

North Island Store Stock Values.

In the Auckland province store lambs have been selling at 6s. to 6s. 9d.; in Poverty Bay two-tooth wethers have made 13s. 2d. to 14s. 7d., forward lambs to 13s. 9d.; in Taranaki ewe lambs have realised 7s. 6d., 4-tooth wethers 14s. 6d., mixed aged ewes 14s. 6d. In the Wairarapa, two-tooth wethers made 7s. 6d. to 9s., four-tooths 11s., lambs 7s. to 11s., culls 1s. 6d. to 3s., springing heifers £6, dairy heifers £14, three-year-old steers £6, year-and-a-half steers £3, four and five year old ewes 5s. 6d. to 7s. In Hawkes Bay two-tooth wethers brought 8s. to 10s. 6d., do. ewes 7s. to 11s., four and six tooth ewes 10s. to 11s., four and five year old ewes 3s. 6d. to 9s. 6d., three-year-old Polled Angus steers £5, year-and-a-half-old heifers £1 5s. to £2, two-year-old steers £2, Jersey springing heifers £11 to £14 5s.

(Continued on page 356.)

Rainfall Returns.

EXPLANATION

In the first column will be found the average yearly (district) rainfall, in the second the total fall to date, in the third the mean fall for the month, the fourth is the average rainfall for the next month based on the return of rainfall ever since records were taken, and in the fifth the condition of the pastures—E, excellent; G, good; F, fair; I, indifferent; B, bad.

WESTERN AUSTRALIA.

No.	Division.	Average Yearly Rainfall.	Total from 1st Jan. to 30th April.	Total Fall for April.	Average Rain-fall, May.	Pastures.
		Inches.	Points.	Points.	Points.	
1	North Kimberley ..	27.04	2,024	—	21	G
2	East Kimberley ..	25.70	1,910	—	25	G
3	West Kimberley ..	23.26	1,612	—	53	G
4	De Grey ..	13.59	967	—	72	G
5	Fortescue ..	9.44	1,317	2	166	G
6	West Gascoyne ..	9.11	661	20	139	G
7	East Gascoyne ..	9.39	149	2	97	B
8	S.W. North Coastal ..	17.85	200	6	231	F
9	S.W. South Coastal ..	30.26	107	121	478	F
10	S.W. Central ..	17.66	183	17	204	F
11	Kucila ..	14.35	89	27	177	F
12	South-eastern ..	9.95	91	4	115	B
13	North-eastern ..	10.23	14	—	102	B

SOUTH AUSTRALIA AND NORTHERN TERRITORY.

No.	Division.	Average Yearly Rainfall.	Total from 1st Jan. to 30th April.	Total Fall for April.	Average Rain-fall, May.	Pastures.
		Inches.	Points.	Points.	Points.	
14	Northern Rivers ..	44.70	3,576	32	31	F
15	Northern Plateau ..	12.38	1,308	—	45	F
16	North-west ..	8.45	843	35	87	G
17	Far North ..	8.48	385	12	67	G
18	West of Spencer's Gulf ..	13.17	547	76	155	G
19	Upper North ..	13.30	1,216	134	135	G
20	North-east ..	8.48	937	83	91	G
21	Lower North ..	17.53	652	22	186	G
22	West-central ..	17.07	474	40	204	G
23	East-central ..	23.71	517	55	284	F
24	Murray Valley ..	13.08	568	19	133	G
25	Upper South-east ..	16.61	490	35	181	G
26	Lower South-east ..	25.51	346	79	285	G

QUEENSLAND.

27	Peninsula North ..	57.76	4,477	395	140	E
28	Peninsula South ..	39.67	3,746	575	56	E
29	Lower Carpentaria ..	28.20	2,215	490	41	E
30	Upper Carpentaria ..	26.02	1,434	126	65	E
31	Barron ..	63.85	6,532	1,112	297	G
32	Herbert ..	76.84	4,667	545	455	G
33	East-central Coast ..	46.96	2,267	79	182	G
34	West-central Coast ..	24.17	1,616	14	84	G
35	Central Highlands ..	25.16	1,091	42	142	G
36	Central Lowlands ..	19.59	863	88	102	G
37	Upper Western ..	15.20	906	56	47	G
38	Lower Western ..	11.98	866	186	69	G
39	Port Curtis ..	37.18	1,544	340	222	G
40	Moreton ..	49.49	2,372	781	414	G
41	East Darling Downs ..	28.30	683	100	175	I
42	West Darling Downs ..	23.84	516	24	149	I
43	Maranoa ..	23.67	489	14	150	I
44	Warrego ..	17.76	872	159	122	G
45	South Far-west ..	13.08	1,073	377	97	G

NEW SOUTH WALES.

46	Trans-Darling North ..	9.11	377	57	81	G
47	Trans-Darling South ..	9.90	667	129	109	G
48	Cis-Darling North ..	13.71	801	262	111	G
49	Cis-Darling South ..	12.44	432	61	127	G
50	Upper Bogan ..	17.55	655	215	143	G
51	Lower Bogan ..	17.83	903	361	145	G
52	Western Macquarie ..	20.02	717	212	155	G
53	Eastern Gwydir ..	23.45	616	177	178	G
54	Nandewar ..	28.40	754	143	198	G
55	Liverpool Plains ..	26.95	1,624	399	173	G
56	East New England ..	31.27	931	166	176	G
57	West New England ..	36.72	1,507	467	217	G
58	Clarence ..	53.62	2,858	923	497	G
59	Orara ..	54.30	3,924	806	495	G
60	Manning ..	49.38	2,554	674	455	G
61	Hunter ..	35.01	1,816	828	312	G
62	Cudgegong ..	25.53	424	510	202	G
63	Central Plateau ..	34.67	1,451	484	271	G
64	Warrumbungles Highlands ..	27.26	1,227	435	208	G
65	Lowlands ..	21.92	824	339	180	G
66	Sydney ..	48.19	1,297	577	491	G
67	Nepean ..	31.75	1,537	567	280	G
68	Illawarra ..	39.92	1,763	887	354	G
69	South Coast ..	35.97	1,492	525	308	G
70	Upper Murrumbidgee ..	25.18	1,180	376	177	G
71	Snowy Mountains ..	40.70	1,055	346	318	G
72	Jugiong ..	30.26	850	240	260	G
73	Tumut ..	21.57	829	241	170	G
74	East Riverina ..	16.46	661	186	166	G
75	West Riverina ..	13.71	460	142	144	G

VICTORIA.

76	Mallee North ..	12.57	586	2	131	F
77	Mallee South ..	13.73	464	22	139	F
78	North Wimmera ..	16.26	399	34	169	F
79	South Wimmera ..	19.58	465	51	201	F
80	Lower North Country ..	16.93	573	58	181	F
81	Upper North Country ..	19.64	608	51	211	F
82	Lower North-east ..	28.48	840	180	271	F
83	Upper North-east ..	42.50	935	171	403	F
84	East Gippsland ..	30.29	706	166	243	I
85	West Gippsland ..	35.12	661	120	314	I
86	East-central ..	33.60	768	100	328	I
87	West-central ..	24.08	616	57	216	I
88	North central ..	26.11	692	45	260	I
89	Volcanic Plains ..	23.88	541	89	230	I
90	Western Coast ..	29.86	483	135	305	I

TASMANIA.

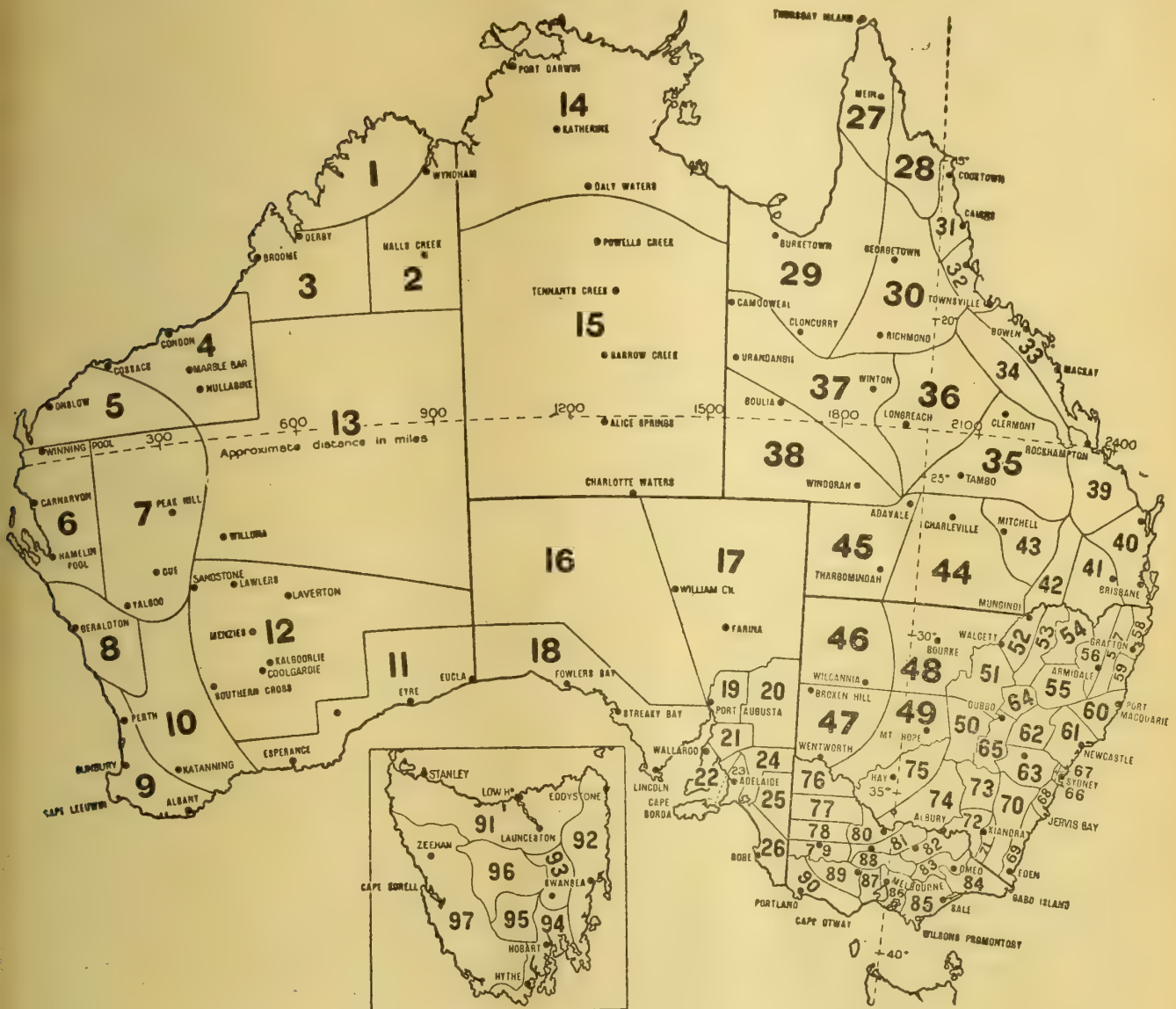
91	Northern ..	41.15	684	240	409	F
92	East Coast ..	32.26	503	186	265	F
93	Midland ..	21.63	503	124	173	I
94	South-eastern ..	27.98	646	140	225	I
95	Dorwent ..	25.51	490	170	202	I
96	Central Plateau ..	31.17	617	163	291	F
97	West Coast ..	36.12	1,921	301	830	F
98	King Island ..	37.17	467	237	411	F
99	Flinders Island ..	27.60	417	120	240	F

N.B.—100 points = 1 inch.

H. A. HUNT, Commonwealth Meteorologist

Australian Rainfall Map.

N.B.—100 points = 1 inch.



Seasonal.

There is little change to report in the general seasonal outlook, except that Victoria needs a good soaking rain. There has been a considerable dry spell, and although some fair showers fell early this month along the southern coastal areas they did not extend far inland. Pastures in most parts are holding out fairly well, but, as stated, a good general fall of rain is needed now to ensure winter feed. In New South Wales prospects are good, and there should be a very satisfactory lambing, although blowflies are very troublesome. In Queensland, conditions are also satisfactory, excepting in the central and south-western areas of the Darling Downs, extending out to Dalby and Goondiwindi, where the country is practically drought-stricken, and stock have had to be moved for relief. The Maranoa is dry, but out in the Warrego the season is magnificent. The middle west of the central division has also had a dry spell. Tasmania needs

good soaking rains, particularly in the south. Pastures are short, but the young grass is making good growth, especially in the north, and stock have held their condition well. South Australia is in excellent heart throughout, as a result of the heavy summer rains, although further showers would enable agriculturists to push on with their seeding operations faster than is now possible. The sub-tropical parts of Western Australia were feeling the pinch of dry weather until early this month, when good falls were recorded almost generally, extending east to the goldfields. The Murchison country, which was badly in need of rain, also received some useful falls, and it is to be hoped they signalise the beginning of the winter rains there, these having failed the last two years. New Zealand needs a good downpour to provide pasture for the winter, especially in the North Island, and Canterbury province in the south. Feed is decidedly short, and with the export business so quiet, there will be heavy stocks of sheep to carry over this year. Marlborough, Otago, and Southland have had more rain than the rest of the country.

(Continued from page 354.)

CANTERBURY AND MARLBOROUGH

There have been some showers during the month, but the land is too dry to cultivate, and feed, especially in North Canterbury, is very scarce. There is a large area in turnips to be fed off, and farmers are evidently reserving them for the winter in preference to attempting to fatten sheep, as the prices are so low for export. The wheat harvest has turned out well, but the prospects of a large crop next year are not very bright, as the land cannot be prepared. With so little business being done for export there must be a large carry-over of sheep this year, and the feed problem will be a serious one unless an early rain with warm weather to follow is experienced. Marlborough has had a good autumn, there having been a better rainfall than in Canterbury. There have been a couple of falls of snow on the ranges in Canterbury, the Mackenzie country having a fairly heavy one, but warm weather following cleared it off the sheep country, although owners had some anxiety for a few days, as the mustering of sheep off the high country had not been completed.

The Fall in Wool.

Giving evidence before the Arbitration Court anent the 3s. bonus application for musters, packers, and drovers recently, in Christchurch, Mr. Leicester Matson, stock and station agent, stated that the price of sheep had fallen 50 per cent.; there was a big drop in the meat market. Mr. Matson, assuming 330 lbs. to the bale, quoted the following average prices, the 1902 prices being, in his opinion, the current prices to-day:—

	Under Govt. Commandeer.	1902 Prices.
	Per bale.	Per bale.
Merino	£28 17 6	£11 13 9
Halfbred	26 9 4	9 19 5
Three-quarterbred ..	23 7 6	7 4 4
Crossbred	21 6 3	4 16 3

The Wheat Crop.

The threshing returns, covering a quantity of 1,301,968 bushels of wheat, show an average of 33.33 bushels per acre, or over 5 bushels per acre above the department's estimate. The trouble now is that the Government having guaranteed prices, and there being a prospect of sufficient wheat for the year's requirements, the millers are not stocking up fully. Growers are wanting money for their wheat, as wool and meat have so slumped, and sheep are only saleable at such low prices. The Government has promised to do something to help the farmers by purchasing wheat up to 31st October. Very few oats are being threshed, as there is practically no sale for them.

Regarding the coming season's wheat crop, one agricultural writer states that so far as Canterbury is concerned, it is extremely doubtful whether there will be any increase on last year's area in wheat for two reasons. Firstly, there is very little land in preparation for wheat, as the soil has been far too dry to enable lea land to be broken up, and the area in rape and turnips which may be sown in wheat is smaller than last year. Secondly, farmers have their sheep to consider, and with the larger number carried over, more green feed must be put in. A considerable area of stubble has already been worked up and sown in feed. No doubt many farmers would, if they could, sow more wheat, but the condition of the sheep and wool markets is against them. There was a much larger lambing last spring than the year before, and with so little now doing for export, it follows that the sheep returns, when taken on 30th April, will show a marked recovery from the decline in numbers that has taken place for several years past. All things considered, there seems little to build a hope upon for a large crop of wheat this coming year. At any rate, the prices promised by the Government are much below those now ruling, but possibly the costs of production will be somewhat lower this year. Horse feed is an important item that will be cheaper. Farm wages are coming down, and there is a demand for lower threshing charges.

Live Stock Prices.

At the Addington salesyards on 20th April forward lambs made 8s. 9d. to 11s. 8d., ordinary lambs 3s. 6d. to 7s. 6d., culls 1s. 6d. to 2s. 9d., two tooth ewes 13s. 9d. to 16s. 6d., four-tooth ewes to

17s. 6d., mixed ages 8s. 6d. to 10s. 6d., sound mouth ewes 3s. 6d. to 8s. 3d., aged ewes 1s. to 3s., two-tooth wethers 9s. 3d. to 10s., four and six tooth wethers 12s. 9d. to 15s. 9d., prime fat lambs 18s. 6d. to 22s., medium 15s. to 18s., prime wethers 19s. to 25s. 3d., medium 16s. to 18s. 9d., prime ewes 15s. 6d. to 18s. 9d., medium 12s. 6d. to 15s., prime bullocks £15 to £19 5s., medium £10 to £14 10s., prime heifers £8 to £12 2s. 6d., medium £5 12s. 6d. to £7 10s., prime cows £7 to £9 12s. 6d., medium £5 to £6 10s., baconers 7½d. to 8d. per lb., porkers 9½d. to 10d. per lb.

OTAGO AND SOUTHLAND.

During the earlier part of the month there were good rains in Otago and Southland, the weather generally being cold. Dairy farmers are well satisfied with the results of the past season, but sheep and agricultural farmers are facing a bad prospect. The season being later in the south, the meat market fell before many were able to get their fat sheep and lambs away, and at the present time heavy fat sheep, such as the northern districts produce, are bringing very low prices. Store stock of all kinds are dull of sale, dairy cows being the only class that are maintaining their values at all well. The harvest is completed, except in the late districts in the south, where it has been protracted by the rains, which, however, have benefited the turnip crops. An abundance of feed is required to carry all the stock that has to be held this winter. North Otago, like Canterbury, has been dry, but more rain fell last month than further north.

Live Stock Prices.

At the Burnside market on 20th April prime bullocks made £17 to £21, medium £14 to £16 10s., prime cows and heifers £13 to £15 10s., medium £9 10s. to £12 10s., prime wethers 20s. to 25s., medium 15s. to 19s. 6d., prime ewes 18s. to 22s., medium 13s. to 17s. 6d., prime lambs 17s. to 22s. 6d., medium 13s. to 16s. 6d. Two-year Hereford steers and heifers £3, two-year Shorthorn cross steers £6. In Southland prime bullocks have made £16 to £18, medium £14 to £15, prime cows £6 to £9, prime wethers 17s. to 22s. 6d., medium 15s. to 16s. 6d., prime ewes 8s. to 12s. 6d., two-tooth store ewes 13s. to 15s., 4, 6, and 8 tooth ewes 14s. to 16s. 6d., sound mouth ewes 9s. to 11s., failing mouth ewes 3s. to 6s., mixed sex lambs 9s. to 14s. 3d., inferior 5s. to 8s. 6d., two-tooth wethers 6s. to 12s., four and six tooth wethers 8s. to 13s., three and four year steers £6 to £8, two and two and a-half year £3 to £4 10s., yearling to eighteen months 30s. to £2 10s., two-year dairy heifers £4 10s. to £6.

United Kingdom.

LONDON, 24th March, 1921.

The past month has been a very favourable period for the farmer, being dry and mild in all parts of the country, and prospects at the end of the month are satisfactory. Crops have mostly done well, and field work has proceeded without interruption. Live stock, especially sheep, benefited, and the season has been very favourable for lambing in early flocks.

Wheat on the whole is a strong, healthy plant, though there are poor fields in most parts of the country. These generally occur on heavy, wet land where the crop was sown late, or was damaged by the rains of January, but in some districts wireworm and slugs have thinned the plant. The area at present under wheat is estimated to be slightly greater than a year ago, having been increased in the north and east, and reduced in the west.

Ewes are mostly in good condition, having benefited from the dry weather, but lowland flocks in some districts are suffering from fluke, and many ewes have died, or been sold off for slaughter. This disease has been especially prevalent in Wales. Lambing is not yet general, except in some southern counties, but up to the present the fall of lambs has been very satisfactory. The lambs are strong and healthy, and losses have been light. In the later districts both hill and lowland flocks are in good condition, and prospects for the lambing season are bright. It is stated that the lambing prospects in Lincolnshire promise to be good, the dominant factor having been the exceptionally fine weather. Numerically, lambs are an advance upon last year, and the number of pairs is gratifying from the breeders' point of view. Both lambs and ewes are generally healthy, so that losses have been few.

On the Wallaby.

Motor Trip to Central Australia.

(Continued.)

PART V.

Alice Springs is as near the dead centre of Australia as any settlement is likely to be for, at any rate, many years to come, being only five miles north of Simpson's Gap, 989 miles by the telegraph line from both Adelaide and Darwin. Central Mt. Stuart, out to the west of north some 150 miles, is geographically the dead-centre, but that is between the extreme northern and southern points of the continent as represented by Cape York and Wilson's Promontory. When the north-south overland line is built, once it reaches Alice Springs from the south it will undoubtedly go out east through Arltunga and the wide mineral belt to the Queensland border, and following up the good pastoral western downs of that State, will go across the Barclay tableland to Darwin. This will mean the pretty little township retaining its present position as the central settlement, commercially, of the continent, for Central Mt. Stuart is never likely to be closer than 150 miles to the line.

The picturesqueness of Alice Springs is beyond all doubt, and a welcome surprise to the traveller, especially in comparison with the exposed situations of Oodnadatta, Marree, and Farina, which are out on open gibbers, and built nearly all of galvanised iron, while "The Alice" houses are nearly all of stone. Snuggling amidst the big old gums, close to the wide bed of the Tod, with the ranges all around, the white houses, though only few, are very homelike, and have a permanently settled appearance, more like the small villages down among the coast hills of the south than one would expect to find in Central Australia, and the bigger rainfall of the MacDonnells (from 10 to 12 inches), compared with the country between them and Lake Eyre, is undoubtedly reflected in Alice Springs and its surroundings.

The township consists of a big and well-stocked general store, run by Messrs. Gepp and Wilkinson, known as good fellows all over The Centre, and the former the local hon. secretary of The Inlander Mission; a well-equipped and extensive police station, with stables and gaol, presided over by Sergeant Stott, a worthy Scot, with the versatility and accent of a Harry Lauder, despite twenty years of strenuous work in the Top Territory; but of the sergeant, who is the "Poo-Bah" of The Centre in the multiplicity of his duties and offices, more anon. There is also the Stuart Hotel, where we put up, getting in places a bit the worse for wear, but clean, and possessing a shower bath, a boon in the bush. Mr. Baker, the manager, an authority on the Arltunga rush days, in the absence of Mr. and Mrs. Brown, the proprietors, on a visit to the coast, introduced us to Mrs. Standley, Mrs. Brown's mother, who in the latter's absence was attending to the housekeeping. If Sergeant Stott is the "Poo-Bah" of The Centre, Mrs. Standley is certainly the Lady "Poo-Bah" of Alice Springs, for she is school teacher, teacher of domestic economy, boarding house keeper, and "Lady that lives in a Shoe" to some sixty children of all ages from 3 to 16 who live at "The Bungalow," an institution run by the Federal Government for the education and up-bringing of piebald children. All caste children, right from half-castes down to octoroons born in The Central districts, when old enough to go to school, have to be brought in by their mothers, and handed over to Mrs. Standley's care. She teaches both sexes up to the ordinary State school standard, and the girls cooking, bread-making, laundry work, and plain sewing. We visited "The Bungalow," which comprises several galvanised iron buildings, during school hours, and found the children, the girls especially, well up in dictation, writing, spelling, and geography. It was very apparent that the secret of Mrs. Standley's successful management was the winning of the children's affection, for she was like a mother to all. The kiddies were of all colours and shades, from black jets and nigger browns to fair little blondes with rosy pink cheeks and yellow flaxen hair, but all with a cross somewhere in their blood.

Sergeant Stott shares with Mrs. Standley the responsibility for the care and up-bringing of these children, and after they leave "The Bungalow" they are to a certain extent still under his charge. With the boys he told us he had little trouble after the leaving stage was reached, as station managers and owners were only too glad to get these boys, able to read, write and count; for in one important way they generally make better stockmen than the ordinary natives of The Centre, in that they can count and have an idea of numbers. The Arunta tribe, the largest tribe in Central Australia, and which occupy pretty well all the country between Oodnadatta and 100 miles north of the MacDonnell Ranges, have no idea of numbers beyond three or four, and no words for same. They have a word for one, another for two, but for three they put one and two-together, and when it comes to four or any number up to ten or twelve they are simply nonplussed, and say "little fellow mob," and for any considerable number "big fellow mob!" "The Bungalow" boys, with their ability to count stock, and with an idea of mileage distances, are in request. They are article out to the stations under a written agreement, in which the employer has to find them in clothes, tucker, and tobacco, and pay 10s. per week into their credit in the nearest P.O. Savings Bank. These caste boys are also wisely subject to the same prohibition law as the natives as regards liquor, and it is strictly obeyed in The Centre. The fine, I believe, for giving a native liquor is £50.

The girls brought up in "The Bungalow," however, when they are fit to leave, give the sergeant and Mrs. Standley much food for serious thought. Many of the stations of The Centre are purely bachelor establishments, with man cooks, and of the balance, where maid servants are kept, they have had the same native or caste maid staff for years, and so few vacancies are open for the girls. If they are allowed to drift, they surely drift back to the blacks' camps, to likely become concubines to some straggler black or white, and their education is both socially and morally wasted. Some four or five of these girls have gone down to Adelaide to positions as general servants or housemaids, and have done well, and Mrs. Standley is most anxious to place more of her girls similarly. Her own little housekeeper, "Edie," a light brown quadroon of about 14, and more like a caste Fijian in her aquiline features than a caste Australian (and whom Mrs. Standley wanted to place down south), acted as waitress at the hotel during our visit, and as such she was courteousness and promptness personified. Mrs. Standley told us Edie was an excellent all-round cook, laundress, and needlewoman, and kept her little cottage spick and span. If she is a sample of Mrs. Standley's girls, then housewives in the towns and cities down south must be in ignorance of such a source of supply, for otherwise Mrs. Standley would be rushed with applications for her girls.

The great difficulty in sending girls south is that they cannot be sent alone over the long ten days' trip of 350 miles by camel mail, and then 700 by train, but it seems a farce and a travesty of what should be a valuable asset to the community to educate these girls up to a useful standard, and then so to speak turn them adrift to waste. The Federal Government, having educated the girls to a stage fitting them to be useful members of the community, should certainly finish the job, and as the girls are ready to leave "The Bungalow" and take positions, arrange for their safe conduct to Adelaide, or towns down south requiring their services, in batches.

Outside the store, hotel, police quarters, and "The Bungalow," there are only about half a dozen private houses in the little township. Here, as along the track, all kinds of vegetables are grown luxuriantly and to perfection, and in the garden at the store we saw in the growth and condition of oranges, lemons, fig, and peach trees sure evidence of the suitability of the soil of the valleys of the MacDonnells for growing citrus and producing dried fruits. Beautifully fresh water is obtainable all around the township at from 20 to 30 ft., and even shallower depths, and it is pumped up to the houses and gardens by windmills.

The Alice Springs telegraph office is three miles over the flats and across the bed of the Tod to the north. The buildings are the most extensive of any office between Adelaide and Darwin, and are most substantial, being of solid stone.

This being the half-way station, all cables are here automatically repeated, and the electricity of the overland wire reinforced by a powerful dynamo. As cables are passing through practically every minute of every twenty-four hours, at least one highly-trained operator has to be constantly on duty, and this necessitates the biggest staff on the line. We received and sent our sheaf of wires, and met Mr. Price, the officer in charge, and the balance of the staff, all courteous and capable fellows, and anxious to help us in any way possible.

Between the township and the telegraph office, on the flat across the Tod, we were surprised to find several yellow box trees, fully as big as the average of that species in south-eastern districts. As this tree is not found in New South Wales and Victoria in districts with a small rainfall, it was an unexpected pleasure to come across "The Old Yellow Jack" in the MacDonnells.

There is pretty well always a big number of natives (the pure "Abos") camped handy to the township, as well as a few odd caste people. The "Abos" are of the extensive Arunta tribe, whose headquarters the MacDonnells have always been. Luckily Messrs. Spencer and Gillen spent a considerable time mastering their language, and thoroughly investigating their social system and ceremonies before the Arltunga rush of some fifteen years ago helped to contaminate them. Since then their social system and strict marriage laws have gradually broken up, and probably are now only kept in their entirety in outlying districts to the west, where the natives have so far had little intercourse with the white man. The "Abos" around Alice Springs are almost continually changing, being mostly, as they call it in their most explicit term, "walk-about people." Sergeant Stott allots them positions for their camps, wisely not too close to the township, and on our arrival there must have been fifteen to twenty whurlies (native huts with sides and roofs thatched with cane grass) and fifty to sixty natives in the blacks' camp.

Camped down on the bank of the Tod bed, with not even a tent, but only a fly for cover, with two camels and a black boy, was a fine clean built young chap, tall and wiry, without an ounce of superfluous flesh about him, a typical Australian bushman. This turned out to be the Rev. Mr. Harland, the representative for The Centre of the Inland Mission, that splendid institution which is trying under great difficulties to make the lot of the men and women who hold the outposts of inland Australia brighter, both materially and spiritually. Mr. Harland was on his way to the Arltunga mineral district, out 50 to 150 miles to the north-east, and thence to Barrow Creek, 180 miles north. Mr. John Flynn, the ubiquitous editor of "The Inlander," had wired him of our being on the track, and he stayed back a day or two to meet us. He was in great spirits over having just started the first work towards the building of The Inlander Hospice at Alice Springs, viz., the cutting and bringing in of the pine logs for the fences, &c. This hospice, which is to be a small bush hospital of solid stone, up to date as regards ventilation and coolness in every way possible for a hot climate, and presided over by a trained sister, the Inland Mission had just let the contract for, and as the nearest medical help hitherto has been at the same mission's hospice at Oodnadatta, 350 miles south, it can be easily understood what a boon in the probable saving of valuable lives this Alice Springs Hospice will mean to The Centre.

The little township to-day is as quiet as a mill pond, with practically nothing to disturb its serenity. The arrival of the fortnightly camel mail from the south and an odd mob of cattle or horses passing through on their 1000-mile journey to Adelaide being usually the most exciting happenings. However, this has not always been so, for when the rush set in to the neighbouring gold belt of Arltunga some fifteen or sixteen years ago, the advent of 2000 to 3000 adventurous spirits from all over the Commonwealth and New Zealand made things very lively for The Centre, and as Alice Springs was the hub it had quite a business boom for the short time the rush lasted. Though colours of gold can be found pretty well all through the Arltunga district, and big ore bodies carrying gold have been proved, the precious metal is nowhere rich enough to pay to work so far away from rail.

(To be continued.)

Perennial Red Clover.

The snapshots of perennial red clover on page 366 were kindly sent to us by Mr. Nisbet Smith, of Bethune, West Guyong, via Millthorpe, N.S.W., who writes as follows:—

"In October 1918 I decided to try this clover, and selected two 40-acre paddocks, one of rich red loam (basalt) and the other of considerably lighter and poorer soil (both old cultivation ground). I let these two paddocks to share farmers for potatoes for the result of fining up the soil in digging, &c. These crops were followed in the usual way with wheat, the arrangement being that my clover seed was to be sown at the same time through the grass seeder attachment on the drill.

"Owing to the share farming arrangement I was unable to make any restriction in the quantity of wheat sown per acre, so it was probably $1\frac{1}{4}$ to $1\frac{1}{2}$ bushels. However, 6 lbs. of perennial red clover per acre was sown at the same time. This was in the autumn, 1919. The drought had been with us for six months, and prospects for anything were not too bright.

"However, eventually a fair crop of wheaten hay came off, leaving only a very poor sprinkling of clover behind. This in December, which ended a year showing the lowest rainfall on record.

"However, a couple of heavy thunderstorms in January brought a surprising response, and the result was the difference of about 12s. per head on 400 weaners, altering them from a store stock proposition of 8s. or 9s. to 21s. at Homebush. After this the paddocks looked completely finished, and I was about to have them ploughed up, but on the advice of Mr. Crawford, of Rob Roy, Emu Swamp, I decided to let the poorer paddock stand another year in the hope that some of the plants had shed sufficient seed to make a fair difference in the coming spring. Before this time arrived the drought broke, and the result appears in the accompanying snapshots (taken a couple of months ago). Most of it was 3 ft. high, and so thick that the sheep when first put in would not, or could not, move through it, but commenced grazing in from the edges. It is a most remarkable thing that a clover of any kind would survive at all through (and sown during) such a severe drought, and a wonderful thing that it should look like this after coming through the lowest rainfall on record in the district.

"This 40-acre paddock now appears eaten well down. It has been stocked with an average of 400 weaners and hoggets for nearly three months. Three hundred have gone to Homebush, varying in prices according to the markets, but each time among the good prices for the day. Had the markets been steadier, and the sheep trucked as their condition showed, I think that this paddock would have shifted 600 weaners as good quality to Homebush by the end of this month (May). Of course, this is a splendid season, but in a general grazing way, sheep in this district (as also appears to be the case in most other places) do not seem to have done so well as when feed is less plentiful.

"This paddock disproves the prevailing idea that the bumble bee is necessary to inoculate with regard to seed. A great deal of seed is now falling. The snapshot of the stack represents one cut off less than 2 acres, and demonstrates the immense growth of this clover. I would say that this pasture in the condition when the photos were taken should carry and fatten ten sheep to the acre for three or four months. It would then need spelling for a necessary period.

"In conclusion I would mention Mr. Crawford's experience, of which he has just told and shown me. One of his paddocks was sown with perennial red clover seven years ago. He had it eaten right out in the first year of the drought, and no appearance of clover remained.

"The paddock was ploughed up and a cereal crop grown, and then again it was ploughed and cropped. After the drought broke, and during the last-mentioned crop, the clover reappeared, and now has possession of the paddock. A single root which has been carefully dug up measures 2 ft. 6 in. in length."



HARVESTER AT WORK IN OATS, TEMORA DISTRICT, N.S.W.



THE OLD HOMESTEAD, TOORILLA PLAINS.

TOORILLA PLAINS, VIA ROCKHAMPTON, Q., THE PROPERTY OF MESSRS. ROGERS AND CO.

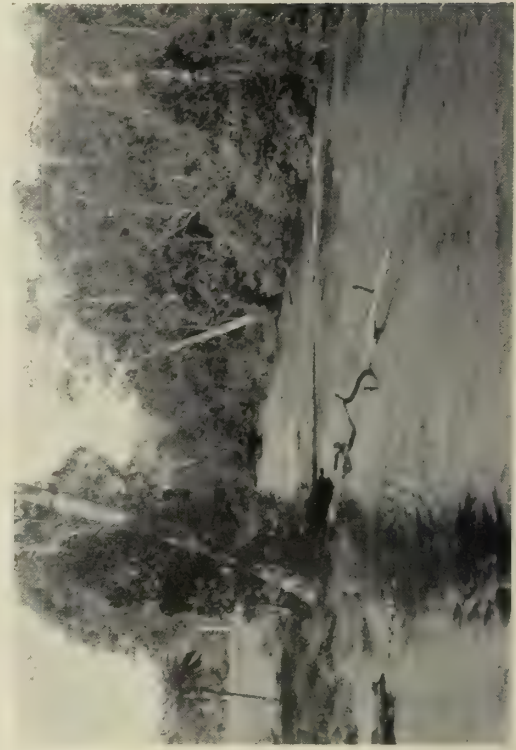
(For letterpress see page 367.)



BRINGING IN BULLOCKS TO DIP, TOORILLA PLAINS.



WOOL TEAMS NEAR HOLBROOK, N.S.W.



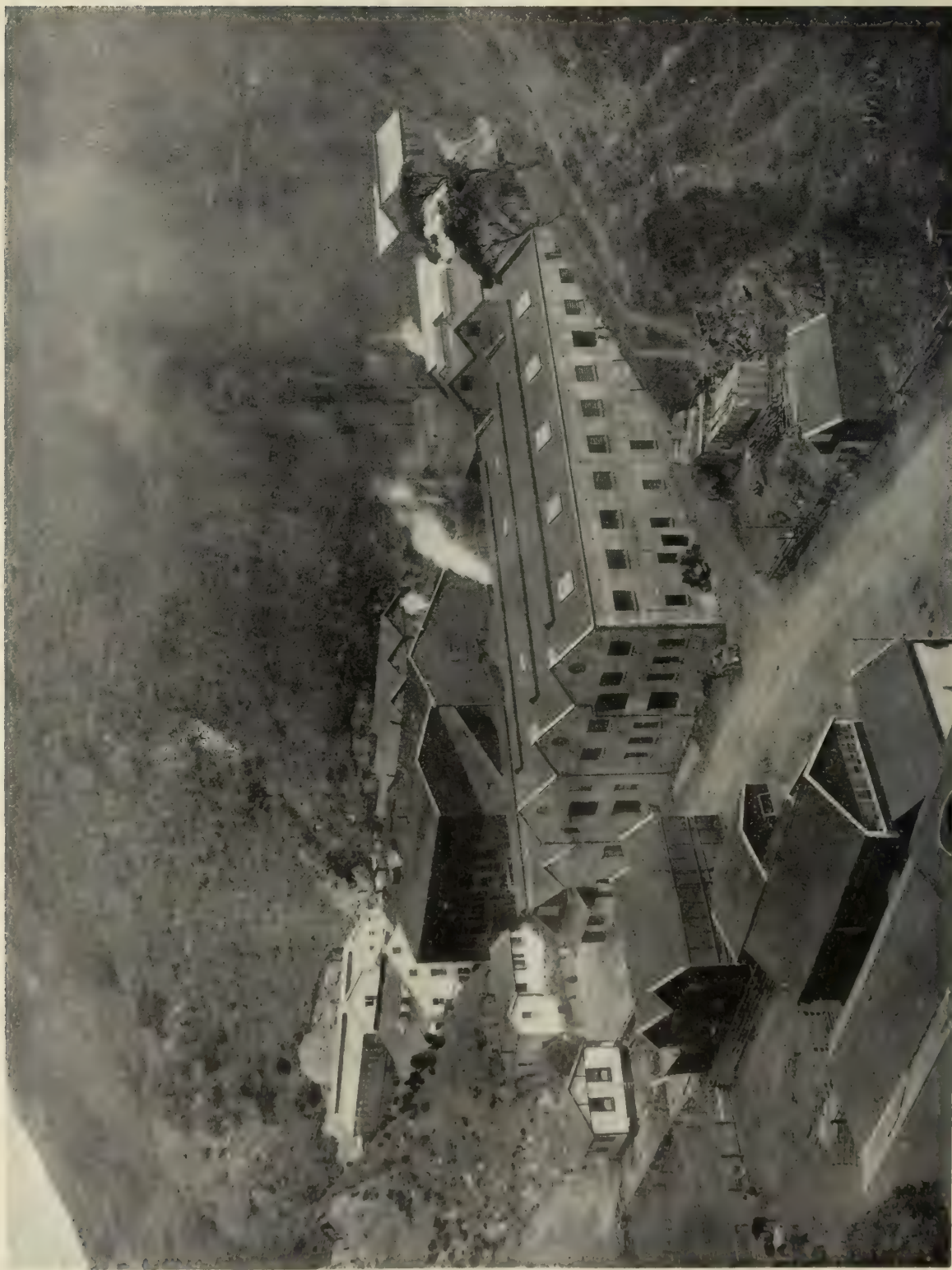
THE UPPER YARRA AT WARBURTON, VICTORIA.



GENERAL VIEW OF SHEAOAK HILLS COUNTRY, WHYTE YARCOWIE, S.A., THE PROPERTY OF MR. K. P. P. SAWERS.



MERINO EWES AND LAMBS ON PITCAIRN, NACKARA, S.A., THE PROPERTY OF MESSRS. SAWERS BROS.



THE NEW ZEALAND MEAT PACKING AND BACON CO. (CO-OP.) LTD.'S ONSLOW WORKS, WELLINGTON.



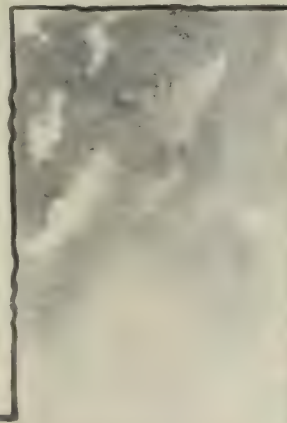
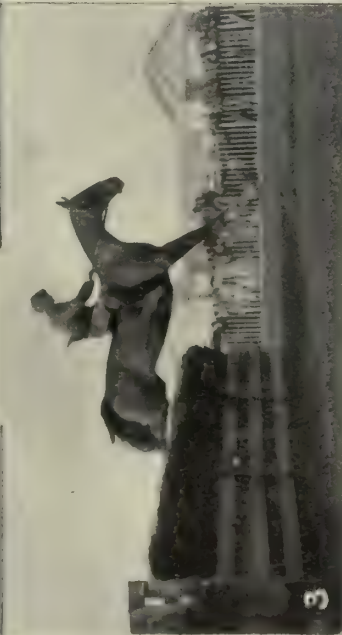
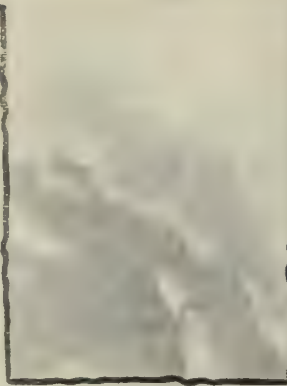
MAGPIE (IMP.).



POETICAL (IMP.).

BLOOD SIRES.

(See letterpress by "Fife and Drum.")



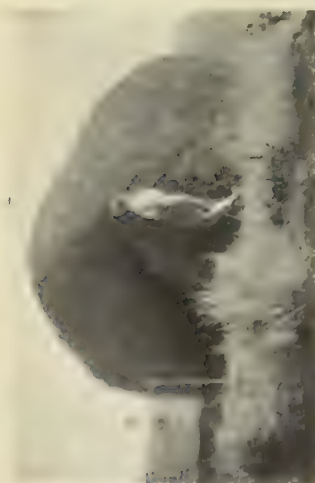
1. MISS G. MAHER'S ROMEO, PALMERSTON NORTH.
 2. MR. H. HASSALL'S MICKY FREE, PALMERSTON NORTH.
 3. MR. B. GORDON'S UTILITY, HAWKES BAY.
 4. MR. J. J. BRYCE'S TWILIGHT, PALMERSTON NORTH.
 5. MR. W. J. SIMPSON'S MAC, PALMERSTON NORTH.
 SOME WELL-KNOWN PERFORMERS AT RECENT NEW ZEALAND SHOWS.



HARVESTING OATS IN THE MARLBOROUGH DISTRICT, N.Z.



A GOOD CROP OF OATS, N.Z.



PERENNIAL RED CLOVER—1 CWT. OFF 1½ ACRES.

PERENNIAL RED CLOVER, GROWN BY



NOTE THE HEIGHT OF CLOVER FROM FIGURE OF BOY.

MR. NISBET SMITH, BETHUNE, WEST GUYONG, VIA MILLTHORPE, N.S.W.

(For letterpress see page 358.)



SHEEP GRAZING IN THE CLOVER.

MR. NISBET SMITH, BETHUNE, WEST GUYONG, VIA MILLTHORPE, N.S.W.



RECORD LOAD OF WOOL, GASCOYNE DISTRICT, W.A., SEASON 1920.

First load of Mr. F. Craig's Yalbalgo wool—74 bales, weight 13 tons 9 cwt. 2 lbs. J. B. Rook's team of 93 camels—78 miles in 7 days

Toorilla Plains, Queensland.

Toorilla Plains, of which we reproduce one or two pictures on page 360, was formed by the late Mr. Frank Newbold, who came out to Australia in 1858, and soon after took up the property. He acquired a small portion of it, which had been taken up but not stocked the year previously, bringing some of his horses from Tasmania, and stock from the south of Queensland. He settled and then built Stanage Bay, on the coast, in addition to the head station. His half-brother, Charles Newbold, was speared by the blacks, and died from the effects of wounds.

Mr. Newbold died at Stanage Bay, in 1872, leaving his property to his only sister, the late Mrs. C. V. Rogers, of Stanage Park, Herefordshire. Her second son, Mr. E. P. Rogers, came out in 1873, and not long after took over the management from the late Carden Collins. One of his first acts was to introduce Hereford bulls in 1876, for which he was subject to much local criticism. The herd was up till then Shorthorns. Ever since that day the best of Hereford bulls have been used only, and now the herd is absolutely pure.

Mr. E. P. Rogers devoted much money to improving the property, which to-day has 21 mills and 5 engines. He gave up the entire management in 1887, but paid frequent visits to the property from England. His cousin, the late E. Norbury Rogers, managed till the early nineties, and after him his brother, the late G. F. V. Rogers, until 1902, when he died in Rockhampton. In 1903 his son, C. M. Rogers, came out from England, and after three years of experience jackerooing, took on the management.

Mr. E. P. Rogers died in February last year, leaving a widow, two daughters and one surviving son (his second son having lost his life on H.M.S. "Monmouth" at Coronel in 1914, being a lieutenant in the Navy). Mr. C. M. Rogers held a commission in the Dorset Yeomanry, 1915-1919.

The property consists of some 59,000 acres of freehold, besides G.F.'s and leaseholds, and is noted for its wonderful fattening propensities, which are due to the marine plains and the richness of the varied salty and water grasses. The plain is only about 1 foot above sea level, and is some 45,000 acres in extent, besides large blocks selected. The present partners are Miss Rogers and the widow of the late E. P. Rogers and his son, C. M. Rogers, who resides at Toorilla Plains.

Useful Hints.

Green Growth in Water Tanks.

Those who are troubled with a green growth or scum forming on top of the water in tanks should try covering the receptacle so as to keep out the light. This has proved effective in many cases; in fact failures, if there are any, have never been reported.

Bluestone for Stomach Worms in Sheep.

Replying to a question as to how much bluestone should be given sheep suffering from stomach worms, "The Breeder's Gazette" says a 1 per cent. solution is usually used. It is made by dissolving $\frac{1}{2}$ of a pound (avoirdupois) of bluestone (sulphate of copper) in a pint of hot water placed in an earthenware dish, and adding enough cold water to make three gallons. The dose is $\frac{1}{4}$ of an ounce for a small lamb, and from $1\frac{1}{2}$ ozs. to $3\frac{1}{2}$ ozs. for large and adult sheep. Starve the animals for 24 hours before treatment. Repeat the treatment in ten days, and again later if necessary. Take great care not to choke the sheep when giving the medicine.

Inoculation for Contagious Pleuro-pneumonia.

To obtain the necessary virus kill an animal that shows by its heaving flanks that it is in an advanced stage of disease. Bleed by cutting the throat high up, turn on its back and remove the abdominal viscera—bowels, stomach, &c., and with a trocar and cannula puncture the diaphragm. Withdraw the trocar and catch the virus in the bottle, filtering it through the muslin. The bottle should then be wrapped in cloths damped with cold water and kept as cool as possible

until used. If the virus is thick, cloudy, or blood-stained it should not be used. Before using the virus a careful examination of the lungs should be made to ensure that they are free from tuberculosis.

The safest point of inoculation is within about 3 inches from the tip of the tail. The threaded needle should be thrust through the soft tissue, not touching the bone, and withdrawn, leaving the thread in the tail. In about three to seven days a reaction may be looked for and the tails should be watched, as some may swell and become gangrenous, when they should be amputated close to the root.

Protecting Grain from Weevils.

Undoubtedly the cheapest method of rendering bagged grain, wheat or maize, immune from attacks by weevils, is to fumigate with liquid carbon bisulphide. This can be done effectively in lots of 12 to 20 bags at a time by pouring into the top of each one to two fluid ozs. of the chemical, placing the bags side by side on a tarpaulin, or canvas sheet, and wrapping carefully so as to keep in the fumes. Do not keep the bags wrapped-up for more than 24 hours, and if possible carry out the fumigation on a bright, warm day (say, with a temperature of 70 deg. Fahr.). A "tryer" serves as a useful funnel for running in the liquid, the heavy fumes of which will permeate the whole contents of the sack, killing all weevils without affecting the germinating or food value of the grain. Treatment should remain effective for about two months, when the bags ought to be examined, and if any sign of reinfestation is noticed the process gone through again. One pound of carbon bisulphide should be sufficient to treat up to 500 bushels of grain, and costs only about 1s. 6d. As the fumes are highly inflammable care must be taken when using.

Sulphate of Iron for In-lamb Ewes.

We have had an inquiry as to whether there is any danger in giving sulphate of iron in a lick for in-lamb ewes. Previously we have recommended the following lick:—1 bag of salt, 15 lbs. sulphate of iron, 25 lbs. slacked lime, and 15 lbs. sulphur. The iron should be dissolved in two gallons of water, and the ingredients then mixed together. The sulphur may be left out in the winter if thought advisable.

Mr. Fras. Evelyn Place, of the Roseworthy Agricultural College, South Australia, and a man of much practical experience, says regarding the above:—"Theoretically, sulphate of iron in a lick for in-lamb ewes might bring on abortion; from my own observations certain cases seem to favour this theory, and therefore I generally omit the drug from licks for ewes. There is, however, a large amount of practical experience which goes to show that the ewes benefit rather than suffer from the use of the drug. The components of the lick quoted are well balanced, and it should be of great value. Probably if carbonate of iron were substituted for sulphate at a slightly enhanced cost, the chance of damage would be averted."

Substitutes for Weights and Measures.

It not infrequently happens on a station that it is necessary to make up a prescription in which small quantities of drugs are ordered. It is then too often difficult or impossible to find the correct weights or measuring glasses. For all ordinary medicines the following scale may be used, but if it is a case of dispensing poisons it would be advisable to wait until the quantities can be determined exactly:—

Solids.

- 26 grains = 1 threepenny-piece.
- 40 grains = 1 sixpenny-piece.
- 80 grains = 1 shilling.
- 100 grains = 1 shilling and 1 threepenny piece.
- 200 grains = 1 half-crown.
- $\frac{1}{4}$ oz. (not quite) = 1 halfpenny and 1 threepenny-piece.
- $\frac{1}{2}$ oz. (and a little more) = 2 shillings and 1 sixpence.
- 1 oz. (nearly) = 3 pennies.

Fluids.

- 60 minims or drops = 1 fluid dram = 1 teaspoonful.
- 2 drams = $\frac{1}{4}$ oz. = 1 dessertspoonful.
- 4 drams = $\frac{1}{2}$ oz. = 1 tablespoonful.
- 8 drams = 1 oz. = 2 tablespoonfuls.

Glass measures that are found in most houses should be used in preference to spoons, which vary in size.

Utility Page.

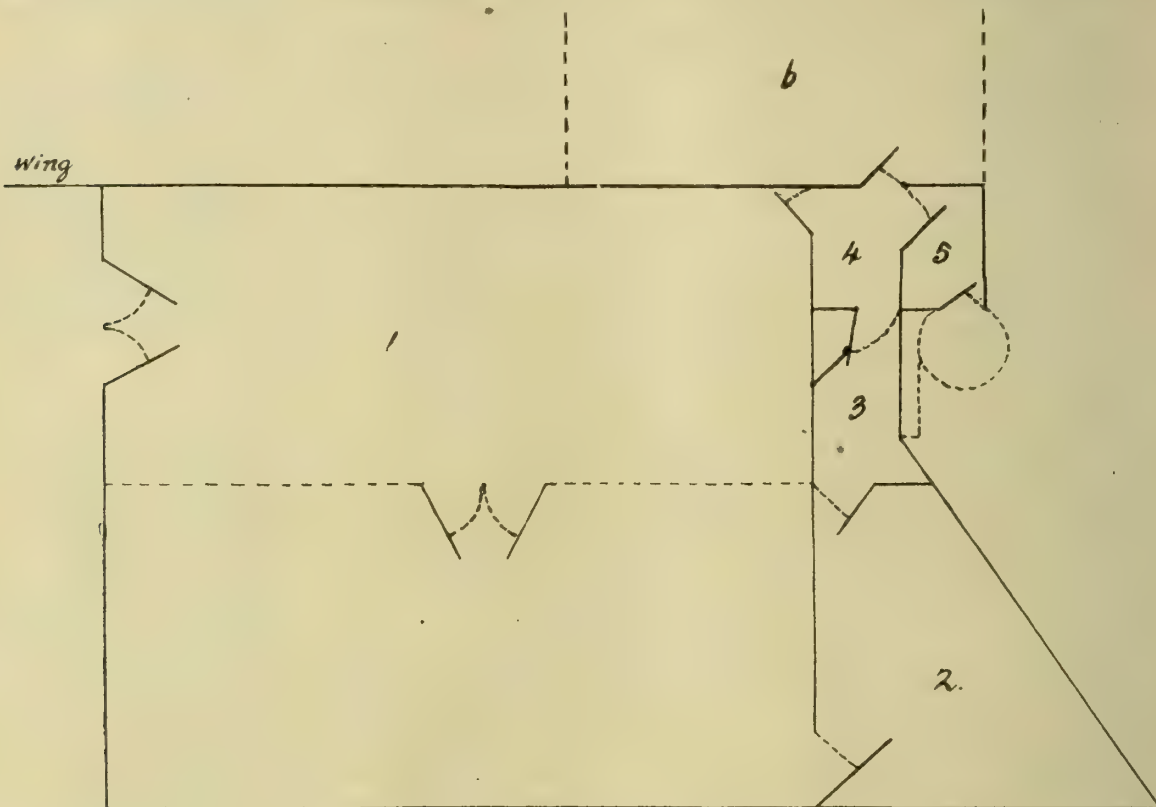
Cheap Cattle Yard for Small Holdings.

Mr. Ernest F. Maclean, Loddon, Eurunga, Q.N.R., sends us the accompanying plan of small cattle yards. He says:—

"I have been moved to do so by seeing the many costly

procurable. I've always found it best to arrange the drafting so that cattle go out a different gate to which they entered. This makes better yarding. All gates to be capped. Hang gates to suit taste, but gate entering pound should be on the ear-mark side to facilitate drafting.

"This yard is not meant for big holdings, but for the small man who cannot afford to employ more than two or three men. I have built this yard myself, and a boy of sixteen is the only help I have in mustering and branding."



PLAN OF YARD, APPROXIMATELY 100 FEET SQUARE.

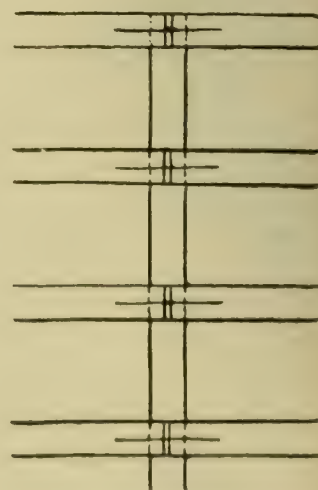
and useless yards that are being built these times. With so many men changing from sheep to cattle on account of dingoes and other pests, numbers cannot afford the costly yards of the big holding, and some, on the other hand, build yards without any knowledge of the principles of working cattle with a few hands and as little exertion as possible.

"The plan should explain itself. The posts are joggled and the rails met in the centre and wired. Posts should be at least 3 ft. in ground and 6 ft. out, bringing the top rail flush with top of post, and bottom rail 18 or 20 in. from ground, as working stock in the yard causes the earth to build up, and as a result the bottom rail is soon touching the ground, and is useless. The other rails can be spaced to suit the number of rails used.

"One can build the main yard first and add on as you go. The plan only shows two ways of drafting (cows and calves). No. 1 is your receiving yard, No. 2 forcing yard, No. 3 lane, No. 4 the pound, No. 5 calf pen. Later you may divide No. 1 along the dotted line, and add No. 6 for a weaner or cow yard, also make a crush off the calf pen and round yard if needed. Gidyea or Boree are the best timber to use in Queensland, but where these are not handy use the best



Side View



Cross Section

News Gottings.

Recently 53 out of a flock of 400 sheep died in a paddock near Uranquinty, N.S.W., as a result of eating paddymelon.

Exports of wool from Canada during 1920 are given as 6,289,101 lbs., compared with 1919, when 11,100,438 lbs. were sent out of the country.

A consignment of about a dozen species of parasite insects arrived in Sydney last month from America. They are being brought here to take part in the fight against the prickly pear pest.

The British Government has appointed a Royal Commission, with Viscount Finley as chairman, to consider and report on the embargo on the importation of live cattle into Great Britain.

Over 2500 head of cattle were lost as a direct result of an outbreak of rinderpest in Belgium. The Government is indemnifying owners for the stock slaughtered. It is hoped that the disease is now stamped out.

The New Zealand Produce Association has been registered in Great Britain. The directors are to be appointed by the Co-operative Wholesale Society of New Zealand and the Producers' Co-operative Marketing Association.

Cable advice from Chicago states that the situation in regard to wool is the worst in the history of the United States. Nearly three-fourths of the 1920 clip remains unsold, and there are no prospects of selling the 1921 clip.

So acute is the housing difficulty in Durban, Natal, that the town council has informed the Agricultural Society it will not be able to hold a show this year, the ground and buildings being required to accommodate people that would otherwise be homeless.

Official live stock estimates for Argentina give the following totals for 1920:—Sheep, 45,309,419; cattle, 27,392,126; pigs, 3,227,346; goats, 4,670,130. Compared with the official figures for 1914, sheep show an increase of about 2,000,000 head and cattle of over 1,500,000 head.

German farmers are reported to be paying a rent of one mark a year for the dairy cows presented them by Americans some little time ago. This is being done so that the stock shall formally remain American property, and not be subject to seizure under any reparation proposals.

The National Association of Wool Manufacturers of U.S.A. estimates the total numbers of sheep in the world as 566,235,117 at the present time. A year ago the number was said to be 579,922,933 head. The world's wool production is calculated at 2,965,410,082 lbs., compared with 2,893,843,048 during the previous year. The association adds that the figures given are only approximate.

"The Bradford Wool Record" mentions that at recent London sales certain German buyers, in addition to handling, were observed to use the sense of hearing when examining wool. If one holds a handful of wool close to the ear, and draws out a staple, the noise so caused in a dry fleece is really surprising. In very greasy wools there is scarcely any sound at all. It only remains for some enterprising buyer to taste the wool!

A consular report from Tsingtau, China, states that, given official encouragement, the cattle breeding industry in the Shantung province would show rapid expansion. At present diseases are prevalent, and the establishment of veterinary services and the importation of purebred animals are necessities. Despite disabilities some 17,300,000 lbs. of beef were shipped from Tsingtau in 1919, an increase of 6,000,000 over the 1913 figures.

As evidence of the bad state of the live stock market, a firm of auctioneers at a sale at Armidale, N.S.W., early this month, reports having sold 700 ewes for 36s. a dozen. The report does not state the age or condition of the ewes. Another local firm yarded about 850 head of good quality cattle, but buyers were not anxious to operate, even at reduced

rates. Bullocks and steers made to £4 5s., fat cows to £5 2s., and aged cows £2.

The Canadian Government tackles the noxious weed problem in a thorough manner. When the last mail left what is known as the inter-provincial weed train was being organised for a six weeks' tour of the three prairie provinces. This was to carry a staff of experts, who, by means of lectures and demonstrations, would make plain to farmers the menace of vegetable pests, and advise on the best methods of combating same.

A cable from Washington, U.S.A., dated 16th April, states that the House of Representatives has passed the Emergency Tariff Bill, which provides for duties of 17½d. per bushel on wheat, 30 per cent. ad valorem on cattle, 1d. per lb. on fresh and frozen meat, 7½d. per lb. on unwashed wool, 15d. on washed wool, and 22½d. on scoured wool. It is proposed that the measure shall remain in force for six months from date of receiving the President's sanction. A later cable, dated 10th May, states that under the present draft of the new Permanent Tariff Bill, which is now in committee, wool will be taxed as follows:—Greasy, 5½d. per lb.; washed, 11d.; scoured, 16½d.

A British trade review states that the textile industry in Germany is enjoying great prosperity. Shareholders in various companies received huge profits last year, and workers' wages have been substantially increased, many earning ten times as much as before the war. There have been large increases in the capital invested in the different concerns. Further, it is reported that thirty-seven companies paid dividends during 1920 ranging from 10 to 36 per cent., and twelve bonuses ranging from 10 to 20 per cent.

According to a return issued by the U.S. Department of Commerce, imports of wool into the United States of America during 1920 totalled 259,617,641 lbs., as compared with 445,892,834 lbs. in the previous year. This was classified as follows, figures for 1919 being shown in brackets:—Clothing, 212,392,240 lbs. (334,099,538); combing, 6,642,783 lbs. (7,734,081); carpet, 35,870,207 lbs. (96,948,324); mohair, &c., 4,712,411 lbs. (7,110,891). During last year exports of manufactured wool were 9,066,620, as against 2,839,980 in 1919.

Period of Infectivity of Tuberculous Discharges.

A series of experiments has been carried out by the University of California to determine how long tubercle bacilli would live when exposed to California climatic influences when no rains intervened, and to what extent cattle would become infected with such materials. Seventeen days after being placed in the experiment plots, tuberculous material exposed in 1½ ins. thickness of manure was no longer able to produce tuberculosis in either guinea pigs or in cattle. The guinea pigs were given direct inoculations, while the cattle were exposed in a small pen and forced to be in a cloud of dried tuberculous matter for an hour on each of two successive days, and were also fed hay thoroughly mixed with the dried tuberculous material.

In waterholes, on the other hand, it was found that 687 days after exposure in one experiment and 548 days after exposure in a second, that the tuberculous material is still capable of producing tuberculosis in guinea pigs when inoculated.

In the case of exposure of tuberculous material when kept moist as in a waterhole, it was deemed necessary to determine to what extent the cattle would become infected when exposed to such material. Here it was found that all of three cattle became tuberculous when forced to drink water taken from waterholes ninety-eight days after such holes were infected with tuberculous material. All of six cattle exposed earlier in the experiment also became infected.

The practical significance of these findings is very evident, namely:—

Enviions contaminated with tuberculous discharges from cattle become free from such infective materials soon after the media in which they are contained are freed from sensible moisture. On the other hand, tubercle bacilli that are found in waterholes, mudholes and watering troughs retain their virulence for a considerable length of time.

Personal.

Mr. Martin Kane, owner of Glenora Station, Croydon, Q., died recently at Cairns.

Mr. F. Hewson, of Tallyrand, Longreach, Q., returned from Europe last month.

Commander Biddelcombe, Golf Hill, Shelford, V., sailed for London by the R.M.S. "Omar" last month.

Mr. E. C. Beckett, secretary of the firm of Birt and Co. Limited, Sydney, died suddenly on 16th April.

Mr. Billyard-Leake, of Kenyu, Burrowa, N.S.W., arrived in Sydney from Europe by the R.M.S. "Orsova" at the end of last month.

Sir Robert Gibson has been appointed a director of the Union Trustee Company of Australia, in place of the late Mr. James Thomson.

Sir Thomas Robinson, formerly Agent-General for Queensland, arrived in Sydney from New Zealand last month by the steamer "Manuka."

Mr. A. W. Pearse, managing director of The Pastoral Review Prop. Ltd., left last month by the "Marella" for a health trip to Java and Singapore.

Mr. A. Cope, who was engaged in pastoral pursuits in the Western District, Victoria, for many years, died in Melbourne on 21st April, aged 81 years.

Mr. J. A. Campbell, son of the late J. A. Campbell, Dunglear, Walgett, N.S.W., has been elected president of the Cambridge University Boat Club.

Messrs. Harold and Norman Pearse, of The Gums, Florietown, South Australia, left Adelaide by the "Marella" at the beginning of the month on a trip to Java.

Mr. Frank Clarke, Bolinda Vale, Vic., has been elected a member of the council of the Royal Agricultural Society of Victoria in the place of Mr. R. C. Bell, resigned.

Mr. Albert S. Austin, M.B.E., of Eilyer, Lake Bolac, Vic., has been appointed to fill a vacancy on the board of directors of the Equity Trustees Company Limited.

Mr. R. J. Lawler, well known as a grazier in the Murrumburrah, N.S.W., district, and afterwards stock and station agent at Young, N.S.W., died recently in Sydney, aged 75 years.

The Hon. D. J. Gordon, M.L.C., Adelaide, has been elected president of the council of the Associated Chambers of Commerce of Australia for the current year, in succession to **Sir Henry Braddon**.

Sir Thomas McKenzie, late High Commissioner in London for New Zealand, who has been called to the New Zealand Legislative Council, has left on a trip to England on private business.

The death is announced from Adelaide of **Mr. T. A. Doman**, a well-known Adelaide merchant, who also held pastoral properties, Yadamalka and Kallioota, in the north-west of South Australia.

Mr. Richard Brown, jun., of William Brown & Sons Limited, wholesale meat salesmen and importers, of Manchester, is at present in Australia, and contemplates returning to England this month.

Mrs. M. Higgins, whose husband took up Bendee Station, Moonee River, Q., died recently at Dalby at the age of 95 years. She arrived in Australia in 1835, and reached Queensland in 1860. Her husband died 20 years ago.

Mr. E. H. Wreford, chief manager of the National Bank, has been elected chairman for the next twelve months of the Melbourne Associated Banks, in place of **Mr. H. T. Wilson**, general manager of the Royal Bank.

The chief veterinary officer of the Commonwealth Government, **Mr. D. J. Kerr, G.M.V.C.**, who controlled operations at the various meat works of Australia, and was stationed at Brisbane, has severed his connection with the department.

Mr. C. J. Henderson, superintendent of the Bank of Australasia for Australia and New Zealand, was presented with an illuminated address by the staff on 9th April, on the occasion of his having completed 50 years in the service of the bank.

Mr. Frederick P. Rowley, director of Gilbert, Anderson and Co. Limited, London, paid a visit to Australia last month, and is now in New Zealand. He will be in the Dominion for about three months, and will then return to England via Canada and the United States.

Mr. and Mrs. Frederick G. Weaver, of Claverton, Woy Woy, N.S.W., celebrated their golden wedding last month, having been married at St. Matthias' Church, Merton, N.S.W., on 11th April, 1871. Mrs. Weaver was the second daughter of the late Hon. Archibald Bell, M.L.C., of Pickering, Denman, and Mr. Weaver is a member of the well known Sydney firm of live stock auctioneers, Weaver & Perry Limited.

Mr. C. E. Murnin died suddenly last month at Bombala, N.S.W., whilst presenting War Medals to returned soldiers. He was engaged in a station supply business in Sydney, and only two weeks prior to his death was the recipient of the King's Long Service Medal. He was a well-known athlete, and went to Pekin in connection with the Boxer outbreak, and also served as a Lieutenant during the Boer War.

Probate of the will of the late **Mr. Frank Reynolds**, the well-known Hereford stud and blood horse breeder, of Tocal, Paterson, N.S.W., has been granted to the Union Trustee Company of Australia Limited and Mr. Darcie F. Reynolds, the executors therein named. The estate, which is valued for probate purposes at £126,046, comprising real and personal estate in New South Wales, is for distribution amongst his widow and family.

The death took place at Emu Park, Queensland, on 16th April, of **Mr. William Coade**, formerly of Baarmutha, which was once part of Wellshot, and to which was afterwards added Dundee and Fernhurst. He was a native of Cornwall, and came out to Victoria, whence he travelled overland to Queensland in the early seventies, and carried out many contracts for tank-sinking before taking up land. He was 77 years of age, and is survived by a widow, son, and three daughters. His younger son, Frank, was killed in action.

The following new subscribers to "The Pastoral Review" have been received during the month from countries other than Australasia:—Messrs. Edward Smith, Worcester, Eng.; T. P. V. D. Wait, Bloemfontein, South Africa; Rhodesdale Ranch, Umvuma, South Africa; Soc. Anon. Sara Braun, Punta Arenas; A. McPherson, Est. San Mauricio, Arg.; Soc. Explot. de Tierra del Fuego, Punta Arenas; D. Barnettson, Paso Santa Cruz, Arg.; R. Cruickshank, Frigorifico San Gregorio, Punta Arenas; Balder Moen, Buenos Aires; J. E. Benney, Falkland Islands.

Visitors to Melbourne Office.—From Victoria: Messrs. J. Scott, Whittlesea; A. R. Goldie, Goornong; P. H. Harvey, Summerhill; C. A. Izon, Geelong; A. E. Humes, F. D. McNab, H. B. Payne, E. Jackson, A. Greenwood, J. Newman Barker, K. Syme, Canon Hughes, Dr. Lang, all Melbourne. From N.S.W.: Messrs. G. F. Surgen, Narandera; H. S. Schollick, Wanganelia; John A. Sloane, Wyambeh; H. Healy, T. Guthrie Bowie, Sydney. From Queensland: Messrs. J. B. Dowling, Toowoomba; A. Howatson, Glenbuck. From England: Lieut.-Colonel S. R. Timson, V.D., Berkhamsted.

Visitors to Sydney Office.—From New South Wales: H. B. Blyth, Cooma; Franc B. S. Falkner, Haddon Rig; J. Barritt, Young; E. W. L. Gordon, Yanterville; S. W. Tindale, Crambo; Mrs. Board, Bondi; H. V. Walker, Carbeens; R. O'Loughlin, Bankstown; C. H. Nicoll, Narromine; J. E. Warby, Red Plain; F. C. Warby, Bywong; W. F. Jaques, Bugilbone; R. A. Reynolds, Hobartville; P. Griffith, Orange; C. A. L. Lillingston, Yulgilbar; E. J. Roberts, Glenogie; Chas. Binnie, 4D; Dr. N. W. Kater, Mumblebone; F. B. Fleming, Holmleigh; J. F. Spora, Brookong; D. Macfarlane, Eureka; H. M. Mair, Colly Creek; H. C. Wilson, Wyaldra Park; Dr. L. J. Fitzpatrick, Aberbaldie; L. G. Wright, Bywong. From Sydney: Major Hinton, J. T. Quinlivan, D. O. Wilkinson, J. Maitland Paxton, H. S. W. Crammer, E. S. Wilkinson, Capt. R. Wilmamson, F. W. Cape, J. B. Cramsie, T. Sasaki, J. Anderson, Brig.-Gen. S. C. E. Herring, Lieut.-Commander Garsia, H.M.S. "Penguin," W. C. Metcalfe. From Queensland: G. Mant, Gligoomgan; G. D. Logan, Cassilis; L. B. Tomes, Junabee; J. L. Wilson, Calloope; H. J. Lloyd, Avon Downs; C. T. Mills, Tambo; D. T. Bray, Dardanelles; J. Dowling, Geham; C. A. Coles, Tyrconnel Downs; R. Healy, Brisbane; D. Williams, Tallyrand. From Victoria: C. R. Murphy, Melbourne; Captain W. Ernest L. Wears; H. M. Turner, Melbourne; W. M. Fleming, M.H.R., Melbourne. From Tasmania: E. M. Garsia, Irish Town. From West Australia: Mrs. J. C. Warren, Dyllabing. From New Zealand: D. Evans, N. Canterbury. From Great Britain: F. F. Rowley, London; R. Brown, jun., Manchester. From South Africa: E. N. S. Warren, Grootfontein; G. Crossman, Durban. From U.S. America: C. E. Moore, Moline, Ill.

Funds for Boy Scouts

The Prince of Wales' appeal for funds for the Boy Scouts' Association is gradually realising the amount asked for by His Royal Highness—viz., £200,000.

At the time of going to press the sum of £55,000 had already resulted, in addition to which the Council of the National Service League at an extraordinary general meeting voted the assets of the league, estimated at £10,000, to the fund the Prince has so much at heart.

His Royal Highness suggests that Dominion papers could help considerably by inviting subscriptions from their readers to the extent, say, of one shilling each to complete a minimum of two hundred shillings. We will cordially receive and acknowledge donations, which will be forwarded to the Prince at St. James' Palace.

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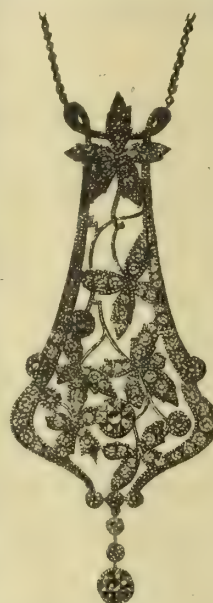
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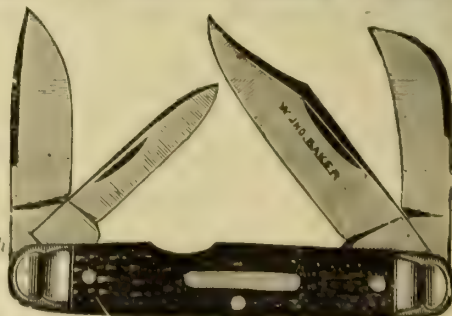
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Australia is faced with one of the gravest crises in her history in the fact that wool, her principal source of revenue, has become a glut on the market, and most of it is only saleable at cost or less. There is no need to go over again the whys and wherefores such a position has arisen. Sufficient that the outlook is serious, and the problem is one which the best brains of the country are making every endeavour to solve, suggestions ranging from the drastic and unthinkable one of destroying the mountain of carry-over wool, which is the great stumbling block in the way of a return to normality, to dumping on the market without reserve the whole of the enormous stocks in hand.

Sir John Higgins, in a statement issued towards the end of last month on behalf of the British-Australian Wool Realisation Association, of which he is Australian chairman, set forth the position very clearly. He said:—

"Stocks of wool largely exceed the world's immediate requirements. An unusually large proportion is in first hands, because manufacturers will carry absolutely only the minimum quantity till convinced that rock-bottom prices have been reached. The same influence is causing manufacturers of woollen textiles in all countries to reduce their operations in their mills to a minimum. Political, financial, and other adverse factors, largely consequent on war conditions, will probably considerably delay the return of prosperity to all branches of trade and industry, but those industries which recognise the true state of affairs, and meet the situation under proper organisation, will suffer the least. Wool interests should realise the necessity for complete organisation and concerted action in order to avert total disaster and provide a slow, steady movement towards recovery.

"Those who advocate letting the market take its course should frankly admit that this practically means allowing,

and, in fact, encouraging, sellers to fight for the limited available demand till prices fall so far below the cost of production as to drive thousands of sheepbreeders, graziers, and farmers out of their occupations; reduce the numbers of sheep by many millions; most seriously depreciate the value of all grazing and farming lands, and throw many thousands out of employment. Scores of millions of pounds' worth of property are at stake in the Commonwealth alone, and interests in other British Dominions are also affected. To assume that a further heavy fall in prices of raw wool would of itself cause stocks of wool to be used up and reduced to normal trade holdings is absolutely contrary to the opinion of the highest authorities in Great Britain, France, and America, and recent experience proves that offerings of coarse cross-bred wool, selling at reserves far below the mere cost of shearing and transport, have not produced any revival of demand. In the opinion of the directors of the British-Australian Wool Realisation Association, if unrestricted competition takes place between carry-over wool and current clip wool, only Merino specialties will cover cost of production, top-making 64's will fall below the equivalent of 6d. a pound of greasy wool in Australia, and all classes below 50's will be practically valueless upon stations and farms.

"In order to avoid any misunderstanding, it must be emphasised that a necessary condition of any scheme for the regulation of sales is that one bale of 'Bawra' wool, i.e., carry-over wool, must be sold against two bales of current clip wool. The directors of the British-Australian Wool Realisation Association had great difficulty to persuade the British Treasury authorities to accept so low a proportion, and to suggest any further reduction would be hopeless, because it would be so evidently inequitable. If Australian sales equal European sales, and the British-Australian Wool Realisation Association only sells carry-over wool in Europe, then two bales of 'Bawra' wool must be sold in Europe to one bale of current clip wool. From 1st January to 31st March, 1921, less than 100,000 bales of carry-over wool have been sold at auction, out of stocks of approximately 3,000,000 bales. This is evidence that British-Australian Wool Realisation Association has acted most liberally in the matter of sales of free wool.

"Owing to fluctuations in exchange, financial stringency, and nervous desire to operate from hand to mouth, buyers would give strong preference to the nearest market, which means London, to the detriment of the magnificent wool-selling organisation installed in Australia. This fact, taken together with the old-established connections and vested interests, makes it practically impossible that the division of sales between Europe and Australia in equal shares can be maintained except by restricting the flow of new clip wool from Australia for sale in London. The recent attempt of London importers in sympathy with the Australian movement, as suggested by the British-Australian Wool Realisation Association, for the regulation of offerings at auction sales and fixing of reserves, broke down owing mainly to the refusal in London of some Australasian banks to participate in and support the stabilisation of wool. With regard to the determination and fixing of reserve limits on wool, there is only one method which is sound and workable, and that is based on the principle of cost of production with, if necessary, variations up and down in special and extreme cases. To attempt to follow market values by whittling them at successive stages is equivalent to abolishing reserves altogether. Speculative topmakers can forestall the next reduction and bring this about by selling tops below wool prices, thus causing brokers to quote wool down to agree with the prices of tops, and so on without any visible limit. This has actually occurred repeatedly, and almost continually since last October.

"The carry-over wools to-day consist of approximately:— 'Bawra' (as owners), 850,000 bales Australian wool; 'Bawra' (as agent for the British Government), 850,000 bales Australian wool; (as agent for the British Government), 800,000 bales New Zealand wool; (as agent for the British Government), 200,000 bales South African and other wools and sheepskins, making a total of 2,700,000 bales.

"If the acceptance of low prices for carry-over and current clip wools should solve the problem, then it would be policy

to face the loss for one season; but on the most optimistic computation it is neither feasible nor practicable for the carry-over wool to be absorbed within several years, together with current and estimated future clips. On 30th June next, the close of the Australian wool year, there will be of carry-over wools from Imperial Government contracts and carry-over wools from present Australian, New Zealand, and Cape clips no fewer than 4,500,000 bales, with shearing under way for the 1921-22 Australian wool season. The directors of the British-Australian Wool Realisation Association realise the seriousness of the wool position and its influence throughout the Commonwealth financially, commercially, and industrially.

"If thorough, whole-hearted, and loyal co-operation and co-ordination between all wool interests cannot be obtained at once—there must be no delay—and carry-over wools are forced upon the markets both in London and Australia in competition with current clip wool, then there is every probability of a debacle occurring."

That is straight from the shoulder, and sets out the position clearly enough. We are faced with stocks of wool in Australia, New Zealand, South Africa and Great Britain amounting to 4,500,000 bales by the end of next month, of which close on 3,000,000 bales are "carry-over," and under the control of "Bawra."

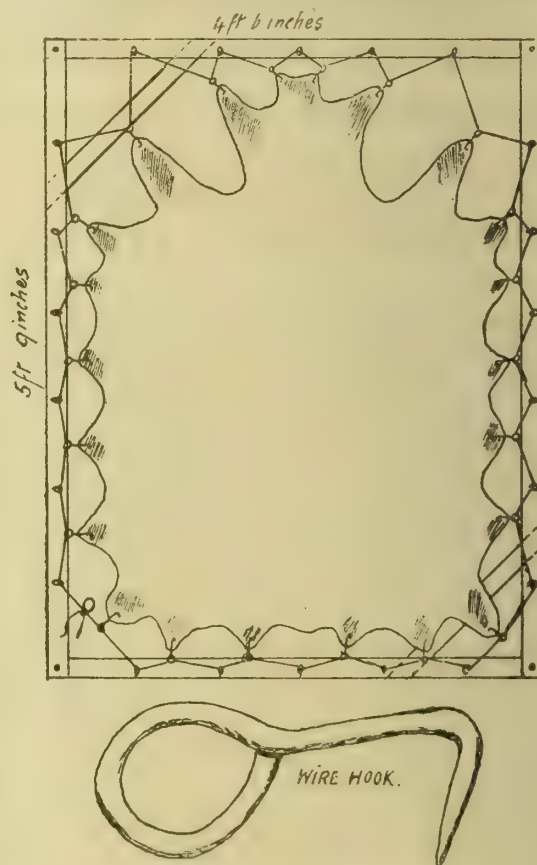
This is a tremendous burden on the trade, and the latest effort to lift it in some degree is based on the recent "Bawra" scheme of reserves, backed up by Government regulation, the idea being that the wool should only be offered subject to an average reserve of 8d. per lb., and that it may only be exported for the next six months under guarantee that it will be subject to such reserve. The first sale in Australia under the new conditions was held last week, and following on an improved tone in London a few days previously, the market proved undoubtedly more healthy than for some time past, though whether it was due to the operation of the new scheme or arose from a better demand created by natural as against artificial factors is open to question. However, the fact remains that a feeling of greater confidence has been engendered by the greater animation displayed by buyers, and it is up to every section of wool interests to lift and keep the trade out of the ruck by that thorough, whole-hearted and loyal co-operation and co-ordination asked for by Sir John Higgins. The most able men in the country are making every effort to solve this exceptionally difficult and complicated problem, and the attempted solution must be given a fair trial. The conflicting interests are so numerous, and the economic factors involved so interdependent, and so apparently irreconcilable, that there is no royal and easy road to normal conditions. The path is rough, and beset with difficulties, but we can only hope it is the right track. Time enough to look for another when we find the present one leads us nowhere.

One thing more, and this is a point that we have frequently stressed during the past few months. Most wools to-day are worth no more, if not less, than they cost to produce, and on the face of things such a state of affairs is likely to continue for some time to come. What does it mean? It means that there is going to be no profit in wool growing, and with no incentive in the way of monetary reward for endeavour, thousands of men are likely to cease wool production. Think of the dearth of employment that would thus be created in a country like Australia, where such a great proportion of industry is dependent in one form or another on wool and its production. We clamour for cheaper commodities, but if wool growing is allowed to become a profitless undertaking, we will never see cheap clothing. The cost of production, therefore, must come down, and at the root of the cost of production lies wages. Till industry can rehabilitate itself, the worker, the station hand, the shearer, the carter, the railway employee, the seaman, the mill hand, &c., &c., must be content to accept what industry can afford to pay. With the realisation of the inevitable in this respect will come cheaper manufacture, lower freights and profitable production, which in its turn will mean greater production, more employment, higher wages in the only true sense of purchasing power, and cheaper commodities.

Handling Sheep Skins.

BY "TALGAI."

The present may not be an opportune time to advance any improvement in the methods of handling sheep skins, as they are worth very little, but as the present bad state of the market will not continue indefinitely, when it does turn in sellers' favour those who handle this important by-product properly will get the benefit of enhanced prices. It is when the market for a commodity is slack that the demand is for those articles which are prepared for market in the manner most calculated to meet the demands of the buyers. On the majority of stations and farms skins receive very rough treatment. From some statistics I have on hand it is shown that as much as 15 to 24 per cent. of dry skins from the country consignees are unsound. Reckoning these pelts minus the wool at 6d., the loss is a serious one. The pelts are often just slung over a rail or wire fence or on a bush and left to dry exposed to all weathers, and often stored without any anti-weevil paint. The skins must also be correctly taken



FRAME FOR DRYING SHEEPSKINS.

off the sheep and free from cuts. To get the pelt to market in a good shape is as necessary as in good condition. Shade drying is preferable to sun drying; the latter will fetch more money. In hot weather the sun blisters the skin. All skins should be painted with some anti-weevil solution. Treating pelts with salt turns out a good skin, but it discolours the wool, and when packed for any length of time they sweat the salt produced moisture.

A proper shed should be built for skins, hides, fat, horns, hair, and other slaughter yard products. There is a very good plan in the "Stockowners' Guide," also an illustration in "Sheep, Farm and Station Management" of how to peg out a skin. [Both these books are published by "The Pastoral Review."—Ed.] As far as the writer's experience goes, pegged skins will fetch more money than rail-dried

skins, which in all other respects are equal. A good inexpensive drying shed needs only a two-sided sloping roof, coming far enough down to keep out the sun, and yet admitting plenty of air. Protect the sides with wire netting to keep out the station dogs. Build some rows of beams about 4 ft. apart round on the top or wholly round, 8 in. in diameter. Leave the shanks on the skin, and throw it over the beam lengthwise, head and tail thus on opposite sides. By having the weight of the shanks it hangs better, and these can be cut off before packing.

A week on the average will dry the skins, which should then be painted with some solution, such as arsenic. It is a good plan to get the skins away as soon as possible, and to press them either in old woolpacks or else have a piece of baling round them and the ties outside this. If no protection is used fold woolly side out. Pegged skins are not laid on the ground, but stretched to the right shape by wire hooks. There is so much more money received from the properly-treated article that it pays to take trouble.

Feeding Sheep in a Drought.

The prospects of the future can only be judged by the experiences of the past. Hence according to this axiom the man on the land must expect periodical visitations of drought. We have to accept the conditions of Nature as we find them, and it is only by studying these conditions that we can hope to evolve some means of making provision against them. A race cannot rise to any heights of greatness and prosperity by accepting a laissez faire policy, or by taking literally to heart the words of Adam Lindsay Gordon:—

“These things are to be and will be,
Those things were to be and are.”

We have to be up and doing, or some other race will do it for us to their own profit.

Of late years, and especially since the last drought, the minds of men on the land have turned toward the evolving of some system of saving their stock in times of drought. In treating this subject, which is so vast, the number of animals to be fed so enormous, and the arable area small in proportion to the continent, with the cost of production so high and the population so limited, the problem will take a lot of solving. It is relatively simple for the man with small flocks who has land on which he can grow feed to store fodder, but when the scene of operations is transferred out beyond the Darling or to West Queensland, no system or scheme seems in sight at present where flocks of 50,000 and more can be fed and saved, except possibly by scrub cutting. The most that seems possible to do is to make a limited quantity of bush hay and save any stud animals. No system of irrigation in that country to grow fodder on any large scale can be done, nor can dry farming as far as we know at present be successfully undertaken. The water is not there, and there is no possibility of getting it there. In years to come, when we have a population of, say, 50,000,000 settled round the coast, they may be able to supply sufficient surplus fodder for the man out back. If the Government bought the fodder at a reasonable profit to the producer, and transported it to the base of consumption at actual cost, plus wear and tear, selling it to the stockowners at cost landed price plus a profit at the ruling rate of interest, the saving of the stock out back might be accomplished. These things can only be done by concerted action and the appointment of a governing body; at present there is no cohesion or sympathy of ideas on the subject.

To be successful the feeding must commence before the animals lose condition, and the times of feeding must be regular. What is the best method and what is the best ration to feed is debatable. The question of price so largely enters into the matter. Wheat, wheat and hay, ensilage are all good, and easily handled. For very valuable animals there are balanced rations of bran, pollard, chaff, pumpkins, &c. Feeding on wheat or grain of any kind is quick. To feed with wheat a good hard flat piece of ground is chosen, and the wheat can be dropped out of a seed drill, first taking the hoes or discs off and dropping broadcast. Wheat straw chaffed and mixed with a little lucerne chaff and molasses fed in bag troughs is good, but involves more labour.

Lucerne is the cheapest fodder to grow, and can be stored for years without deterioration, but the area suitable for it is not so large as for other fodders. Still this is counterbalanced by getting three to five cuts from the area in a year as against one from wheat or oats and corn, or two crops of cereals, the former in summer and the latter in winter. With the cereals there is both the grain and the straw, and sufficient profit could be made from the f.a.q. wheat to pay for the straw and inferior grain kept for feeding. Ensilage is fine fodder, and no trouble to keep, but requires more knowledge to make than hay. About $1\frac{1}{2}$ tons of this will feed 1000 sheep a day; 4 bushels of wheat and 15 cwt. of hay; 8 bushels of grain. With grain one man with a drill can feed as many sheep as three men can with hay.

A most important item is plenty of water, and at no great distance. When the stock have to travel far to water most of the good obtained from the feed is spent in walking. When feeding stock on dry fodder or scrub give plenty of coarse salt and sulphate of iron, about 5 per cent. of the latter. Place this in troughs near the watering places. Separate all the weak stock, otherwise they do not get sufficient of the feed, and the strong animals knock them about. Timbered country is the best to feed in, as the sheep pick up leaves and get shrubs to nibble at, besides the protection from the weather.

Take one acre of good lucerne land, sown with Hunter River broad leaf, and well looked after. This should yield $1\frac{1}{2}$ tons of dry hay each cutting, and give four cuts a year at least, that is a total weight of 6 tons. Allowing 1 ton per 1000 sheep per day, this will then feed 6000 sheep for one day, or 1000 sheep for six days. A 50-acre stand will thus produce 300 tons dry hay, and keep 1000 sheep alive for 300 days, or 5000 sheep for sixty days. To get this quantity of hay stored is not at all a costly or hard matter. The writer has 35 tons stored at the present time from 17 acres, the first cutting being in August last, and in addition 7 tons have been sold. Two men, if there is no hurry from showers, can get the whole lot in under a week. The following is the actual cost, and is correct for getting in the 17 acres plus a cutting taken six months previously, and sold prior to the cuttings since August:—

Superphosphate	£2 18 6
Salt (for putting in the hay in barn)	0 17 0
Wages, mowing, raking, cocking, carting, stacking	25 14 7
Wages, cutting seven tons chaff, bags, twine, oil, rail	12 11 6
Interest on money sunk in land one year at 5 per cent.	12 15 0
Depreciation, repairs, sundries	5 0 0

£59 16 7

This works out at £1 8s. 6½d. per ton for the 42 tons produced. Reckoning the labour as before at 8s. per 1000, we get £1 16s. 6½d., or £2 3s. 5½d. cheaper than wheaten grain when fed alone. The wages in the above statement are made up as paid 11s. per day and men find themselves and sleep at home.

To make the matter successful the back country wants covering with light tramways, like those used on the sugar plantations, and the fodder carried at cost price plus 7 per cent. for depreciation and interest.

These remedies will come in time, but not before there is a large population. What is now laughed at by those who persist in their Micawber-like attitude will then be accomplished.

Common Sheep Diseases.

Sheep in Australia are supposed to be free from the troubles that other live stock are subject to, and this belief amply proves the truth of Tennyson's statement that “a lie that is half the truth is ever the worst of lies.” It also lulls us into a false sense of security, and every sheep man knows at the bottom of his heart that disease does account to some extent for the animals that do not come in to muster, no matter how optimistic he may be about the good health of his own particular flock.

On the other hand, there are pessimists who consider that sheep die out of sheer cussedness. And there are even those

who consider that the popular lack of knowledge of sheep diseases may be construed into absence of disease. Therefore it may be not entirely undesirable to consider a few of the commoner forms of illness that affect sheep, both from the sheepowner's and the veterinarian's point of view, because the aggregate value of sheep in Australia is so great that efforts to conserve individuals really add to the country's wealth.

The comparatively low value of the individual sheep, combined with the scarcity and high cost of veterinary services, have in the past been two factors that have been detrimental to the development of ovine pathology. Certainly there have been brilliant exceptions to the general *laissez faire*, but these serve rather to emphasise that condition than to atone for it. Of recent years the facilities offered in the veterinary schools of Australian universities for research into sheep diseases have to some extent removed the anomaly that the animal representing the most money should have the least veterinary attention bestowed on it.

But the utility of such investigations has been hampered by two conditions that still exist, and until they are modified sheep men will still look askance at veterinary work. These conditions are, first, that the scientist as a rule has worked within the walls of his laboratory, and his practical acquaintance with his patients has been made under very artificial conditions; while, on the other hand, the practical sheep man has been led away by ideas and theories that have often been devoid of foundation on scientific facts. Thus the two men who should have been working hand in hand have only too often been working at cross purposes, and difficulties in diagnosis have arisen and beclouded the judgment of the two classes of observers who should have been best able to help each other.

In addition to this, the stockman has very often had a closer acquaintance with the sick sheep than the owner, and in many cases, often in order to save trouble, and from an honest belief in his own skill at diagnosis, has reported the deaths to be due to some definite condition, when as a matter of fact they have been caused by something quite different and beyond his skill. As the sheep is dead there seems to be nothing more to be done for it, and the matter is dropped more or less. If the number of deaths becomes excessive some investigation is made, but this is often perfunctory and incomplete. On the other hand, the stockman's intimate knowledge of the conditions and appearances of health, of the natural attitudes and habits of sound sheep is an invaluable help in detecting changes of habit and attitude that point to a deviation from health, pointers that the scientist in the laboratory is deprived of.

But one is bound to admit that the diagnosis of disease in the living sheep is by no means so easy as it is in the horse or cow, partly because one does not come into such immediate contact with the sheep, and partly because immediate contact means complete alteration in the sheep's normal surroundings, and when disease is so far advanced that the animal does not care a straw what one does to it, treatment is not likely to do much good, and early causes of the attack are masked by complications that in themselves are quite apart from the true nature of the disease.

The ordinary helps to diagnosis, such as pulse, respiration and temperature, are equally as valuable in elucidating the nature of disease in sheep as in other live stock, but it is practically impossible to avail oneself of their aid. The natural pulse, some 60 to 80 per minute, immediately bounds into the hundreds on account of the excitement of being caught, and to take it one has to depend mainly on getting it at the artery inside the thigh, a performance the sheep does not render any easier by standing still.

The twenty to fifty respirations, too, run into uncountable numbers, and the character rather than the count is what one has to depend on. The stockman knows this better than the scientist, and it is one of his chief aids in detecting sickness among his flock. He can see from a distance whether the breathing is hurried or slow, shallow or laboured, and bases

his opinion as to the cause of trouble largely on this set of symptoms. The normal temperature of 103 to 104 F. or 39.5 to 40 C. is greatly interfered with by handling a sheep, and the use of the thermometer is therefore of little practical use. Such things are only for the artificial conditions of the tame and educated sheep of the laboratory stall.

The single sheep falls ill, dies, and crows, dogs and foxes take more interest in it than shepherds, and little is gained in pathological knowledge; it is just so many shillings off profits. Forty or fifty fall sick and die, and are a general nuisance; they have to be got rid of somehow, and their wool and skins are worth a little attention, but rarely does a post-mortem with any attempt at accurate observation help to enlighten us. More generally some obscure theory, such as "coasting," accounts for the mortality.

A hundred or a thousand are sick, and they just have to get better or do the other thing. A sick horse or invalid dairy cow would occupy a couple of men's time for an hour or two, but to muster up and upset the whole running of the station because some of the sheep are off colour is quite a different matter, and then as likely as not one does not know what to do with them if they are run in, and very likely they would die anyhow. Yet their worth is far more than that of the horse or cow; surely men are a good deal like sheep at times.

When the sheep is killed, the 45 to 63 per cent. of its carcass that is meat is of far more interest than the balance that forms the fifth quarter, hence the opportunity to become acquainted with the anatomy of the inside of the sheep is lost, and the butcher or meat inspector in the city abattoirs has a far better insight into the organs of the healthy sheep than has the man who grows it. This should not be, for the accumulation of a sufficiently large number of facts is the only basis on which scientific deduction can be based. So comparison between healthy and unhealthy appearances should be made as often as possible, and many conditions which appear queer and unnatural on first sight will be found to be quite normal in the long run, and vice versa many things like worm cysts that are often looked on as normal will be given some consideration in working out a cause of sickness or death.

Therefore in making a p.m. the best thing to do is to go steadily through the whole carcass, making notes of external appearances, such as a death struggle or quiet demise, character of discharges from the natural openings, attitude and appearance, if blown or not, condition of the carcass when the skin is taken off, and so on. Then a careful search through all the internal organs, commencing with those in the belly, then in the chest, and finally splitting open the head, for in it are often worms and conditions that account for a good many of the symptoms that puzzle in the live sheep. In some cases it will be necessary to preserve certain organs for transmission to some central laboratory, and later on, when specific cases are being dealt with, details of the best way of doing this will be given, as well as guides to certain points that will enable one to know which organs will be required.

As an outline of the method of dealing with the common diseases of sheep in following articles, it will be best to take them in groups first, and individually under those groups. Such groups naturally fall into the order of organs involved, as breathing diseases, digestive, urinary, skin, feet, and external parasites, diseases of the reproductive organs, contagious diseases caused by microbes and similar germs, and the large class connected with worms and internal parasites.

An endeavour will be made to briefly state the cause, symptoms, and treatment of the individual troubles, and if the knife should loom largely in the matter of treatment it will be because prevention is better than cure, and the drenching, dipping, and dressing of large numbers of sheep may in some cases be more costly than letting nature take its course, so that the factor that really governs the whole question, the economic aspect, will often overcast the advisability of treatment. On the other hand, suggestions will be thrown out that may show the apparently impracticable to be really worth the trouble involved.

(To be continued.)

Foundered.

Affected Horses Still Useful on the Farm.

BY H. WILLIAMSON.

Several morbid conditions are still called "founder" or "foundered," but more commonly a change of structure in the feet is intended by those who use the term. Fever in the feet, or laminitis, is inflammation of the highly sensitive red leaves which dovetail exactly into the corresponding spaces of the hoof, and to which they are strongly attached. These laminae, or leaves, cover the foot bones, except on the articular or joint surface. They are strongly adherent to the bones by dense connective tissue. The name of "coffin" bone was probably given to the chief of the three bones of the foot because it is so completely encased, as it were, in a coffin of horn. Being full of blood vessels and nerves running through almost countless holes in the bone, and supplying every part of this red velvety material, it is easy to understand how intense is the pain where there is no room for swelling when laminitis attacks the animal.

The Causes.

The fat and overfed may get congestion of the laminae without leaving the stable; the overworked or strained by pulling too heavy loads or carrying an inconsiderate rider too fast or too far; spells of work and periods of idleness; certain foods, as beans and peas and maize, in excess and dry, hard roads and high action and "pounding." It may be said that high action does not necessarily accompany pounding of the road, as our best hackneys seem hardly to touch the ground, or so lightly that the foot-prints are hardly visible, unless on a soft surface or in dust. Many horses pound the ground because their conformation is such that they must take short steps forward with long extension in a backward direction, thus animals with heavy forehands and thick shoulders, as well as big heads, strike the road with much force, although their action is not high.



Fig. 1. Bones of the Foot

Horses with wide, flat feet and low heels are specially prone to fever in the feet, and of the acute type which, in the most severe cases, results in shedding hoofs. Cattle suffer from laminitis, and more often shed the hoofs than horses, and it is quite remarkable how the malady escapes the eye of the owner at first. A lame cow does not receive the immediate attention that a horse does, and disruption is more easily effected, the attachments of the double digits not being as strong as those of single-hoofed horses, mules and asses. Heavy old boars and sows may lose hoofs from the same cause. Although upright feet are less liable to sole

bruising and concussion resulting in laminitis, they do not wholly escape, but more often take on a chronic form, less severe and crippling, but inducing lameness in varying degrees, and slow but certain structural changes.

Changes and Symptoms.

To show the changes precedent to founder we give here a rough sketch of the bones of the foot in their normal relation to each other, and to the hoof as outlined; the dark strip in front indicates the laminae, which have not been stripped off to show the bones (Fig. 1).

In the next illustration, a bad old case (drawn from a real specimen), we see the toe of the pedal bone pointing



Fig 2 Toe of Pedal Bone pointing down.

down almost at the centre of the foot instead of its front running parallel with the wall of the hoof. We ask, "How did the change come about?" During the attack of fever or acute inflammation of the laminae the attachments were disorganised, and the products of inflammation have taken their place. If such a foot is dissected and examined in a fresh or relatively fresh condition, the interposing material will be found like cheese of varying consistence. The laminae of the soft kind have let go both of the bones and of the leaves in the hoof, and some time is needed before the substituted cement holds well enough for the animal to work again.

A foundered horse puts his heel to the ground first, his action being the exact opposite of one with navicular disease. Rings form on the hoof, which are easily distinguished from grass rings. The bulbs of the heels develop to meet the extra requirements of greater weight imposed upon them. The sole bulges, especially at the place where we have indicated the coffin bone as pointing downwards. The foot is not concave, as it should be, but decidedly convex, and presenting a surface readily bruised by stones or upon a level road if not protected by some artificial means.

Skillful Shoeing Helps.

A good farrier can make such a horse useful, and he should receive extra remuneration for his skill. The owner will have to take him with greater frequency to the forge—no "three times a year" shoeing will do for a foundered foot. The ground surface will need protection by a leather in a bad case, or at least by a shoe that will afford the largest amount of cover possible, without being boxed in and inaccessible. As the foundered horse puts his heel to the ground first we make a shoe for him that is tapered away almost to nothing at the end, and favour his new method of progression by making the toe thin as well. In this way we get the rocker shoe. The sides or "quarters" are thick, the toe and heel thinned away. Then, as regards the under surface, we want "cover" or iron protection without bearing on the weak sole. The bearing is, therefore, confined to the crust or not beyond the white line, as

the union between the crust and the sole is called. That portion of the wide webbed shoe which covers the sole is "seated out," or, as the carpenter would say, bevelled or chamfered away.

No hard-and-fast rule as to nailing should be insisted on, such as four outside and three inside nails for fore feet that are sound, but the best portions must be selected by the farrier after sounding the hoof for hollow or seedy



Fig. 3 Shoe intended to give cover

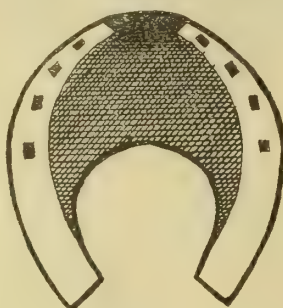


Fig. 5 Seating out of Sole surface.

places where clenches would hold only on the periople or outer hard layer of horn, which is necessarily the most brittle. Fig. 3 is an exaggerated example of a shoe intended to give cover, but is a copy of a real shoe used. Fig. 4 is a side view of the rocker, and Fig. 5 is intended to show the seating out of the sole surface.



Fig. 4 Side View Rocker Shoe

Horses badly foundered are practically useless for heavy town work on stone sets, but may long do good work on the farm. Accommodation is reached, but the structures never revert to their original position. This article has run into some length, but one ought not to leave the subject without saying that laminitis may occur without any of the previous causes mentioned, but as metastasis or sudden transference from a bodily organ to the feet, as, for example, when a mare foals to-day and is found with laminitis to-morrow, or a case of congestion of the lungs is relieved by transference to the laminae.

The Northern Territory Problem.

Federal Control a Rank Failure.

By "NORTHERNER."

Development more complex than ever.—White Australia up-to-date.

—The doctrine of Bolshevism.—Four agriculturists left.—

Mining collapse.—Failure in stock raising.

After ten years of Federal control the tropical portion of the great Northern Territory, that province known on the map as Arnhem Land, is in a sorry plight. Stagnation and retrogression are the result of all the expert knowledge and waste of money spent in the endeavour to convert a tropical country into a temperate zone. The closing down of Messrs. Vestey Bros. meat works has sent Darwin into the slough of unemployment, and no one remains but civil servants in a land that under another Government and other conditions would be a hive of industry.

Cavanagh-street, under the new regime and the advent of the Turk, Greek, Italian, and Patagonian is now a fiery

Bolshevik rendezvous, where the disciples of Lenin and Trotsky air their eloquence on the benefits of Soviet rule and the downtrodden slaves of capital. Ye gods! If Darwin is an illustration of this rule, then God help Australia, or any other country where it is in practice. All these new arrivals are members of the A.W.U. or I.W.W., whichever you like. They want a maximum wage for a minimum day's work. They like ease and comfort, and yearn for the cafe and gondola. Darwin fits them; it's more than a home from home.

Unionists Support Chinese.

So labour troubles are now a hundred times more complicated than under the rule of South Australia. Dr. Gilruth's pet Southern European theory has been bowled first ball. The White Australian problem has become more complex with the advent of the foreign unionist, who by the way deals off the Chinese. These good unionists prefer the Chinese to the European. And the Chinaman is a non-unionist by compulsion, because the A.W.U. will not admit him to membership. And the Chinese pay very low wages to their employees, while Europeans pay a high wage. The union claims for its members the right to deal where they please. He has strange ideas has the unionist. He refuses Chinese admittance to his union, but the union member can deal with Chinese if he likes, and he forces on the European storekeeper strictly union conditions. The average wage of a Chinese store employee is £10 per month, while that of a European is £20, so it will be seen how sincere the unionist is in his protestations.

A Blow for the "Experts."

When the Federal Government took over the Territory, and the new regime set in, legislators like Mr. Josiah Thomas were cocksure the tropical north would rapidly be developed with white labour, and the Adelaide, Daly, Alligator, Roper, and Katherine River districts would become settled with settlers engaged in mixed farming. The Old Territorian laughed at the ideas of Dr. Gilruth and the "expert." Every tropical dweller knows no tropical country can be developed by white labour. The idea is preposterously absurd. No tropical country in the whole world can show such a thing, and Australia's north is no exception. It is all a matter of pigment. But the north is a ghastly failure, so ghastly that the population dwindles away daily, and there are now four agriculturists on the Daly who would leave also if they could. The experimental farm is in the same plight as that instituted by the French mission some twenty years ago. These missionaries were also certain they could develop the Daly country, but they failed because the conditions are too severe.

The only place where there are any pretensions to cultivation is at the Roper River Mission Station. But all the work is done by the blacks. Sisal hemp, cotton, fodder plants, fruits and vegetables grow luxuriantly with water, which goes to show that if coloured or black labour were used extensive areas could be cultivated and the land prepared for the future. But a white man asks £5 a week, and will only work certain hours. The White Australia policy is madness in a land cursed with every pest imaginable and seven months' drought. Even if white men could and would work in tropical fields the country is too poor to pay the wages. All the north is poor, poor in soil, pastures and minerals.

Spoon-fed Mining a Fiasco.

And what of the mining industry? There is no mining. From Brock's Creek, the commencement of the metalliferous country, to Pine Creek the traveller passes through a wilderness of wrecked mines and desolation. It's a sorry sight in a land where thousands of tons of low-grade ore lie buried in the ground. Not a single mine is working in the 60 miles. The Coronet Hill copper mine, which was financed with Melbourne capital, does not pay working expenses. The shares are now quoted at 25s. sellers, and no buyers. Four years ago these shares were quoted at £6 and £7, but it is the same old Territory story. Only by the cheapest labour and up-to-date machinery could any of these mines be made productive.

Marranboy, the Federal Government's spoon-fed tinfield, where £50,000 was spent on a 10-stamp battery, is not pay-

ing miner's wages. The battery management, like everything else, is defective. The miners petitioned for the removal of the manager on account of the loss of tin in the method of treating the concentrates. The creek is the best claim. And the battery is continually breaking down. The trouble with this field is it is too far inland. It is 240 miles from Darwin, and 40 from the Katherine railway terminus. Crushing charges are too high, cartage too dear, while provisions and material are prohibitive. So this great hope of the Territory hangs fire, and a handful of claim-holders mark time and exist by virtue of the storekeeper. This field is similar to the other tinfields, patchy, with rich veins and leaders, but no permanent lodes. Mining is in a worse state to-day than ten years ago, when the Northern Territory Mining and Smelting Company's works were going, and several fields like Horseshoe Creek were flourishing.

Unsuccessful Sheep Farming.

All that is left is the pastoral industry. With the closing of the Darwin works 40,000 cattle went to Queensland and the southern States. Darwin cut its own throat, and the agitator is on the rocks. The coastal country, however, is very poor pasture, and will not carry more than one head of cattle to the square mile. Seven months without rain speaks for itself, and without irrigation agriculture and grazing are a hopeless proposition. Coming to the pastoral country about Bitter Springs, now called Mataranka, one sees another failure of the Gilruth regime. Some 2000 Merino sheep were taken there from Avon Downs, close to the Queensland border. They mostly perished from spear grass, but the wool is more like hair than wool. The remnants have been taken to Vandalin Island, where their demise is certain.

Merinos in the tropics is another joke of the southerner. The southerner goes north to teach the northerner, and falls in every time. Dr. Gilruth told the writer he would establish sheep farms all down the Roper. He became very angry when I laughed and told him Dr. Brown dropped £80,000 on the Katherine in the same project. But the late administrator could not be persuaded: "There is nothing in this country," he said, "to prevent its development by white labour, and on European lines!" All the Clydesdales died, most of the Shorthorns perished, while the sheep have disappeared. But the Arua or swamp buffalo flourishes, and the Zebu or Brahmin cattle would do famously. They have not been imported, however. As it is with the human so it is with the beast. All tropical animals have a black skin, consequently they can withstand strong sun rays and intense heat better than European animals. Moreover, insect pests do not drive them to frenzy, and cause redwater and swamp cancer.

What is White Australia?

The Federal policy is all wrong, and will have to be altered and modified before any real development can take place. The accepted policy of Australia is to keep it white, but how can this be done and develop the north? If Australia were a temperate climate the ideal would be easily carried out. However, above parallel 13 deg. it is tropical, and will never be developed by white people alone. White Australia is a myth in the north. From Broome to Townsville two-thirds of the inhabitants are coloured. Japanese practically control Broome, so they do Thursday Island. Darwin is in the hands of Chinese, Patagonians, Greeks, Turks, and Russians, who do not like work of any kind. They are politicians of the fiery order.

In Cairns and the Mulgrave and Mossman districts every second person you meet is an Asiatic. The station cooks are all Chinese or Japanese. The servants in hotels are of the same nationality. About Halifax and Lucinda the working population is Chinese, Japanese, Hindoo, and Italian, yet we say we have a "White Australia." It is only in the imagination. The north is coloured and always will be so. The Kanaka developed the sugar country, and if Australia wants to develop the tropical Northern Territory some such means will have to be employed. There are millions of acres of good fertile soil and thousands of tons of minerals, but they never will be made productive with white labour only.

[As we have many times pointed out, the compromise with the "White Australia" policy that offers the most hope of success is that which will allow the ingress (under indenture) of coloured labour to the tropical portion of the continent north of the 75 deg. wet bulb isotherm, or line drawn through all the most southerly points having an average summer wet bulb temperature of 75 deg. The wet bulb temperature should not be confused with the dry bulb, which gives no indication of the humidity of the atmosphere. A wet bulb reading of 75 deg. Fahr. would be far more trying than a dry bulb one of 100 deg. Fahr. with low humidity.—Ed.]

Wool Production in Canada.

BY W. F. STEVENS, Calgary, Alberta, Canada.

The sheep industry of Canada is to-day passing through a serious crisis. Although wool production is not the primary object in sheep raising in the country, men embark in the business when wool prices are high, and abandon it when wool prices fall. In the year 1913 the American market was opened to wool from the outside world. Wool prices immediately rose in Canada, and more and larger flocks were established throughout the country. During the war she had a distinct advantage in marketing her product over countries more remote from the seat of conflict. The class of wool grown in Canada was well suited to the manufacture of the kind of clothing required by soldiers, and hence found ready sale. This condition of the wool market led to more numerous and still larger flocks of sheep.

Then the war ended, and trade was disorganised. The wool that had been unmarketed in the southern hemisphere and the antipodes was thrown on the market. Wool suitable for the making of worsteds rather than for khaki was in demand, and Canadian wool found less ready sale than formerly. Naturally, prices declined, and many who had "bought in" at high prices were financially unable to meet the changed conditions. Many serious losses and some failures resulted, and the question now is where will the downward movement in prices stop, and where is the Canadian woolgrower to find a market for his surplus product in the future?

Canada's market in the future for her surplus wool is the international and not the American. She has followed the practices and methods of the Americans in preparing her wool, she has adopted American terms or adopted terms of her own to designate the various grades, she has also followed the American method of selling, and has got nowhere in the wool-producing business. Canada extends 4000 miles from east to west, through a country which for a distance of 300 miles, and in some places for 500 miles, in width is well suited to the growing of sheep. On this vast area she has a population of about nine million people, and only three and one-half million sheep, and with this limited number one hears on every hand that the farmers and ranchers are "going out of sheep." The Australian, with his five million people and an average of about eighty million sheep; the New Zealander, with his one million population and twenty-four million sheep; the Argentinian, with his eight million people and forty-four million sheep, must, when they hear men say, "The Canadians are going out of sheep," ask themselves, "Were they ever in?"

But, as in all things else, there are reasons. What are they? We will not undertake to enumerate all of them, but will single out the one most frequently given to the "Sheep Commissioners." Messrs. Dryden and Ritch, who inquired into this subject some ten years ago, namely, the low price of wool. At all of the hearings in the western provinces, after the woolgrowers had stated their troubles and given their opinions concerning the reasons why more is not being done in the way of producing wool and mutton in Canada, Mr. Ritch proceeded to explain wherein the Canadians were themselves the cause of most of their troubles. He pointed out that even among farm flocks, from one end of Canada to the other, but particularly in the west, one often found in one flock ewes, some of which were of long-

wool breeding, others of fine wool, and still others of Down, while on the ranches one found these characteristics not only in the ewe band, but among the rams as well. The sheep were shorn in the order in which they could be most easily caught in the corral, and the fleeces thrown into the wool sack in the order in which they were shorn. The fleeces were tied with coarse Manila twine, and packed in unlined bags. He told them that so long as these methods continued low prices would prevail. He explained that the good and bad fleeces being thrown together indiscriminately all sold at the price of the poorest.

A decade has passed since then, and it is fitting to ask ourselves how much progress has been made in our methods of production and marketing as a result of the educational work that was done at that time. Some improvement has been made in breeding, but even now most flocks, particularly in Western Canada, may still be described as heterogeneous in breeding. The Manila twine has been superseded by paper cord, and the unlined jute bag has given place to one having a similar exterior, but paper lined. On this point substantial progress has been made. Assembling the wool at a central warehouse, and there sorting it and labelling it according to the type to which it belongs, is another long step in advance, but much remains to be done in that respect before the work here can be said to be on a par with that of recognised wool-producing countries.

Up to this point, imperfect as much of the work still may be, Canadian wool could nevertheless be shipped abroad and find a market, but for the fact that the international terms have not been employed in designating the type and quality. On this point little progress has been made since Mr. Ritch addressed the woolgrowers ten years ago, and because of this the Canadian woolgrower still limits himself to the Canadian and American markets. During the past year he has been fortunate, because the American manufacturer, foreseeing that a duty will be placed on imported wool, made his purchases largely in outside markets. He knew that because of the manner in which the greater portion of American wool is put up and labelled it could not be exported, consequently, most of the 1920 clip is still in the growers' hands, and in a few months another clip will be added to it. When this occurs conditions will be ideal for forcing down prices; in fact, reports are now being received to the effect that many are selling at present quotations rather than meet the competition of another year's clip. Woolgrowers everywhere perceive what is coming, and many "are going out of sheep."

There is little doubt that an effort to adopt an "emergency tariff" against wool from outside countries entering the United States will be more successful during the prospective special session of Congress than was the case during the regular session just closed. All that was necessary then was a President favourable to the idea; they have that now, together with a Congress and one-third of a Senate, an overwhelming majority of whom were elected on a high tariff platform. Even if the new tariff should not go into effect before shearing here is completed, which is very unlikely, Canadians can expect nothing but low prices in a market which has already a two-year clip on hand.

What, then, is the proper course to pursue? In this, as in most similar cases, there is the proper or wiser course, and there is also the course that will probably be taken by a great many of our woolgrowers. They will do as many others have done during the past twelve months; they will "go out of sheep," but such action will reduce the industry to still smaller proportions than it now possesses, and cannot be accepted as the true solution of the question that continually confronts us, "Why do Canadians pay so little attention to sheep?"

The answer to-day is just the same as was given to Messrs. Ritch and Dryden, "the low price of wool; and the reply to that is very much as it was ten years ago:—"Canadian flockmasters must conform to the requirements of international wool markets in order to obtain the benefit of the international trade. Canadians grow the same classes of wool as do the Americans, and handle it in much the same way, consequently as the duty will be designed to protect the American woolgrowers against outside competition, it will strike the Canadian grower first and hardest. When the American manufacturer requires wool of a type different from what is produced in his own country, he

must go into the world's markets for it; he must pay the prices ruling there in order to secure it, and he must also pay the duty his own country imposes. In that case "the foreigner does not pay the tax." The American manufacturer pays it himself, and when he has done so he has placed himself at a disadvantage in the sale of his product with his foreign competitor, who is not thus handicapped. Furthermore, although the American manufacturer will have "easy picking" in securing his wool supply in 1921, what about 1922 and the years following, because, there, here, farmers and ranchers are "going out of sheep." This will reduce his home supply, and compel larger purchases abroad, and all will tend to place the international market where it was before war conditions, with its commandeering and embargoes, interrupted the normal movement of trade. It is to this market that the Canadian woolgrower must look for his outlet, and to this end he must study its requirements and conform with them.

Canadians must exercise more care in breeding, and thereby secure a more uniform type of wool than they now have; they must give better care to their flocks during the winter months, and by this means improve its quality; and they must exercise the same care and follow the same methods in sorting, packing and labelling their wool that are followed by other large wool-producing countries. When they have done this they will be able to sell to United States buyers just as advantageously as they have done in the past, whenever that market offers the best prices, and they can sell in the international market when the American market fails.

The foregoing is the principal obstacle in the way of greater wool and mutton production in Canada. There are a few minor obstacles, but these are of a local nature, and will doubtless disappear once sufficient interest is aroused to overcome the one referred to.

War on the Maggot.

BY S. E. PEARSON, Fairfield, Longreach, Queensland.

Boor-ri, the blackfellow, was watching me set a blowfly trap the other day. For a long while he said nothing, and then he chipped in, "That one blowfly," he said, "too much quick fella. More better, boss, mine thinkit you catchim maggots."

This started me thinking. (I don't often think—it is rather wearing.) It seemed to me, as to the blackfellow, a mad sort of performance to expect a blowfly to go through a small hole into such an obvious thing as a trap. It is like a Capitalist asking one of these I.W.W. blokes for the loan of a fiver. It's unnatural. A blowfly ought only to be asked to do those things that seem most pleasing and natural to it, viz., to come enthusiastically and blow your meat in as large quantities as it can.

A blowfly, I take it, unlike the Shearers' Union, doesn't blow (and blast) the squatters' sheep out of sheer ill-humour. It blows because being what it is—what Nature made it—it has to either blow or burst. The blowfly appears to me to be a good parent, in so far as it universally endeavours to deposit its larvae where it thinks they will do most good. In good seasons, I have noticed, when there is plenty of grass about and no sheep dying the blowfly is at its worst as a pest. In drought time when there are plenty of dead carcasses about it never touches live sheep, even though it may obtain in millions in the locality, as they did here in the dry time of 1919. This points to the fact that the blowfly does not consider a live sheep a very good mark as a general thing, and will only set fire to their tails when nothing else is offering.

In good seasons when no offal or putrid carcasses are to be had the flies will blow blankets or wet saddle cloths rather than not blow at all. I once knew the flies so bad on the Lachlan in 1900 that they blew a selector's over-draft. To protect sheep in their paddocks the simplest way out seems to me to be to provide something the flies can settle on, and cherish, and call their own.

While waiting for Professor Lefroy and those others to get out their six—or is it fourteen?—different kinds of chalcid wasps to maul our blowflies, we have been doing a bit on our own in waging war on the fly pest out here. Since Boor-ri spoke, our motto on this place has been, "War on

the Maggot," and let the blowflies rip. They are a bit too nimble for us.

Ruffacies is obliged to reproduce himself regularly or go out of business, so it occurred to us that if you can successfully prevent his maggots from developing he must of necessity become extinct in one generation. This is our method at present. When there are no dead sheep or offal about we provide the raw material for the blowfly's business. Many a ram-stag and many an old gummy ewe have gone west on this place as an offering to Ruffacies on the altar of sacrifice. In slack times we even shoot hawks and crows, and mop up neighbours' dogs for bait. Any old smelly thing does to bait the traps—from political reputations to dead cats. We invite any and every blowfly in Australia to come and blow our meat. All are welcome to do their worst. Meanwhile, we merely see to it that never a maggot gets away.

The altar of sacrifice is generally two petrol tins (nearly everyone has spare petrol tins) telescoping sideways one into the other. Both tins have one side cut out, and the opposite—or underneath side—of the top tin has $\frac{1}{2}$ -inch holes punched through it to allow the maggots to drop through into the bottom chamber—their prison. Whenever a dead sheep occurs, or we have offal about a yard, the putrefaction is thrown into the top tin and the flies allowed full access to it. As the mess becomes fly-blown the maggots work down, and eventually, before the chrysalis form takes place, drop through into the bottom tin. We used to place a little cheap antiseptic in the bottom chamber to kill the maggots as they came through, but that is not required.

Nothing is required but plenty of blowflies and some putrid meat to get very good results. The trap costs nothing, and you can set it with a pitchfork or a long handled shovel. Collected dry maggots are easily exterminated by pouring same into a tussock of grass or a lump of roleynoley while afire. Renew putrefying contents every ten days or so during the fly season. Have seen an oil drum full (5 gallons) of maggots got from the single setting of a trap —a seething, masticating mass that must have accounted for many thousands of prospective bright young blowflies. A bait to the square mile in sheep paddocks will do. Blowflies travel great distances up wind when seeking a smell. "Him plenty quick fella."

Food Control in Great Britain.

The British Ministry of Food, which ceased to exist on 31st March, had during its lifetime a turnover of £1,200,000,000, and a net profit of just upon £1,000,000. The administrative expenditure was 13s. 4d. per £100 worth of food bought and sold. The following are the Ministry's figures of sales for the different commodities during the period of control:—

Butter, cheese, and milk products ..	£125,856,000
Meat supplies	475,880,000
Cattle feeding-stuffs, oils, and fats ..	193,488,000
Tea, dried fruits, and sundries ..	80,180,000
Bacon, hams, and lard	292,448,000
Vegetables and fruit	32,148,000

Approximate turnover £1,200,000,000

To this total has to be added the purchases made by the Royal Wheat Commission for the United Kingdom, amounting to £1,200,000,000, and the purchases of the Royal Sugar Commission, £323,000,000, making a total of £2,723,000,000. The Royal Commission on Wheat Supplies was also responsible for purchases made for allied and neutral countries amounting to another £250,000,000.

Wheat was the only foodstuff in which a substantial measure of control remained after 31st March. This was due to the fact that during the war the Government entered into agreements with British millers which entitled the latter to be consulted with regard to the date of decontrol. The negotiations with the millers, it was officially stated, "had been rendered difficult by the violent price fluctuations which have recently taken place in the wheat markets of the world."

Letters to the Editor.

The Shearing Question.

To the Editor.

Sir,—It amazes me that your readers do not address you on the above subject considering that the position of the wool market threatens an immense number of growers with a wool return actually smaller than their shearing costs.

I have spoken to many, and all seem afraid that instead of making an effort to undo some of the harm our leaders did last year it is possible they may make some further concession. Of course, they may not, but did anyone believe that last year's concessions would have been granted? I have not met one who did.

It would be waste of space to now enlarge on any of the new demands of the A.W.U., but surely we cannot afford to agree to any one of them.

It is recognised that on an average not more than four and a-half days per week are worked by shed hands, whom it is very difficult to get rid of once they have started, although many are deplorably ignorant of their duties. I feel confident that a large majority of shearers would prefer 48 hours and runs as before instead of 44 hours and two-hour runs, but I fear their leaders will never allow them to take a vote on that question for obvious reasons.

I am confident that it is the duty of our Pastoralist Union Councils to offer an opportunity to station managers and practical owners to meet them with the idea of being supplied with such information as possibly they may not have at their fingers' ends before the A.W.U. is again met in conference.—I am, Sir, &c.,

"GRAZIER."

9th May, 1921.

[We quite agree with "Grazier's" views. Never has there been greater necessity for putting up the strongest possible fight against the A.W.U. demands. It is not a war of offence, but defence. Profit in the industry is perilously near vanishing point, and with the disappearance of incentive to go on producing, the community in general will be properly "up a tree." Western Australia has stuck to her guns, and has definitely decided that no shearing shall take place, except north of the De Grey, at other than 1920 rates.—Ed.]

The Wool Position.

To the Editor

Sir.—Mr. Hughes again mentions in his speech his suggestion of twelve months ago that Bawra wool should be kept out of the market altogether for the present to assist in stabilising the wool industry. This, I think, all Australians as a nation should approve of, and Britain, I think, would do likewise if proper representations were made. The Bawra wool cost Britain nothing, and when they entered the scheme it was not for profits, and now if they insist on realising on Bawra wool they will ruin us. This, we know, they do not wish to do.

We went into the scheme and were under a delusion from 1916 to 1920, as though we received seemingly good prices for this period, we paid most of the excess in war profits and other taxes, and now when we are losing heavily we have not got the reserve that the previous prices would have allowed had it not been taken in taxation. We now realise that the means by which these seemingly good prices were got has reacted and destroyed present and future values, thereby more than counterbalancing 1916 to 1920 net prices, and actually already bringing them down to a low average and still lower eventually.

The present accumulation of wool was made by Britain after making provision for war requirements, they benefiting by having a monopoly over our wool, and a guarantee of supplies to maintain their industry as well as making a direct profit. This we willingly accepted in entering the scheme. The British Government benefited at Australia's expense, and received all the money they expended, interest.

a profit of 5 per cent., and now hold further reserve funds, thus proving a magnificent investment.

Sir John Higgins mentioned in his recent statement that the best that could be arranged with the British Government was for the sale of one bale of Bawra to two bales of free wool. Surely they will waive this in our extremity, and meet us in a give-and-take way, and accept any reasonable proposals for holding Bawra wool over. If this is not so, I would be glad to know what the objections are. I am, Sir, &c.,

GAVIN S. HARRISON.

Sydney, 30th April, 1921.

The Strike and other Social Evils of the Land.

To the Editor.

Sir,—A lot of good suggestions remedial of our strangling strikes and other repressive activities on the part of the rest of the community towards the primary producer, the man who carries the country's baby, have from time to time appeared in your columns, but it seems to me that none of them strike at the root of the matter, which is, I think, the ignorance of the city dweller of economics, and his unfounded envy of and prejudice towards the people in the country from whom he has his being.

Now it is little use for those amongst us gifted in that way to write articles upon the subject to such papers as yours or to the daily press, because the people we want to reach either do not take in the papers which would print such, or when they do, read little of the paper but the police court news and the racing columns.

I hear from a friend that in U.S.A. the employers are putting on traveling men versed in such subjects to show the working men how strikes, &c., always hurt the workers most, and it seems to me that something of the sort should be done in Australia in the interests of the primary producer, and by the only class which has the necessary technical knowledge of the subject as it affects him—I mean by the producer himself.

Now, may I just outline how this may be attempted. In all the Australian cities we have picture shows galore, the patrons of which must be by this time pretty fed up with the usual stuff screened, and their minds unconsciously prepared for something worth while, and about their own country, too. My idea is to have moving pictures taken of every phase of farm and station life, particularly during drought; rabbit and dog destroying measures; show them farmers preparing land for seeding, and then the rotten crop; put on slides showing the cost of raising a sheep or a crop of wheat and figures showing what each section of the community gets out of it from farm or station to London. The screening of these films could be supported by competent lecturers, practical men, who could invite audiences to ask questions and give ready answers. I have evidence that some of our Universities are teaching courses of economics which to my mind are the reverse of what young Australia should learn, while no one (I must now except Mr. Hughes) of importance is teaching what I would wish to be imparted.

I hope that these suggestions will find merit in your eyes. We have the means, the men, and the opportunities to put it into action. If we failed to move the adult city person we would be impressing the juvenile majority, which in time would bear the Commonwealth good fruit.—I am, Sir, &c.,

"VILLAGE HAMPDEN."

Western Australia, 29th April, 1921.

The Subdivision of New South Wales.

To the Editor.

Sir,—The attached map shows a suggested subdivision of the State of New South Wales, which I think would serve the interests of those occupying the four proposed States reasonably well. It would give to each State an area and source of national wealth which would be ample on the taxation which they are now paying to enable them to finance whatever form of local government the coming Federal Convention might determine on for them, and they would certainly get better value for the taxation paid if they expended it themselves through their own elected representatives than if, as now, it were expended in glorifying Sydney. The Northern State—"New England"—with a rainfall of from 20 to 60 inches, would devote all its energy and finances to dairying, agriculture and grazing. The Western State—"Wentworth"—with a rainfall of from 12 to 18 inches, would devote all its energies and finances to grazing, mainly Merino wool growing, and would certainly be better off if it elected its own Land Board or other governing body than it is with that board appointed by and continually interfered with from Sydney. This State would have a magnificent waterway from end to end through the centre if the Darling



River were locked so as to make it navigable continuously, and it will never get that while it is controlled from Sydney. It would also be relieved from a possible cause of trouble by giving up to South Australia the Broken Hill district, which should naturally belong to that State with which it is connected by rail, and where all its interests are.

The Southern State—"Riverina"—with a rainfall of from 15 to 40 inches, would, like the Northern State, be mainly agricultural and pastoral, and would comprise the whole of the Murrumbidgee Valley and include the Federal capital. The Central State—"New South Wales"—with a rainfall of from 20 to 50 inches, containing a large area of agricultural and grazing land, on account of the enormous coalfields lying along the seaboard must necessarily become the manufacturing State of the Commonwealth, and will always carry the heaviest population in Australia.

The movement for subdivision, which is so energetic in New South Wales, is certainly not going to end here. Queensland and Western Australia are already demanding subdivision into three States each. South Australia will probably ask for subdivision into an agricultural and purely grazing State. Victoria and Tasmania are compact and self-contained States, which certainly could not be improved by subdivision at this stage of Australian development. This

being so, the chief work of the coming Federal Convention must be to deal with the subdivision of States, and we who believe in subdivision should prepare for that convention by organising all over the Commonwealth and providing funds. We "New States" men must help each other from Cape York to Hobart and from Sydney to Perth. Victoria and Tasmania may not want subdivision for themselves as they are now situated, but they can help us who do want it very materially in the Convention. Should a general election come on for the Federal or State Parliaments before the convention for the revision of the Constitution is held, we should see that our representatives shall go in pledged to subdivision, and give no vote to those who are not so pledged.—I am, Sir, &c.,

W. E. ABBOTT.

Wingen, N.S.W., 1st May, 1921.

Warts on Cattle.

To the Editor.

Sir,—Could you or any reader inform me what is the cause of, and incidentally the remedy for, warts? A steer of about 15 months was in such a state that it had to be destroyed, and I notice indications of another being infected.—I am, Sir, &c.,

SELECTOR.

Central Queensland, 18th April, 1921.

A cattleman of long experience writes:—"I have had very little experience with warts in cattle. Thirty years ago I had a stud heifer that got covered with them, and they killed her. Another took bad the same way, and as there was no prospect of her getting right I shot her. I have often taken an odd wart off by tying a silk thread tightly round it against the skin. The wart dies, and eventually drops out. I have not the faintest idea what causes them. Youatt in his work says: 'The actual cause is unknown,' and he suggests that they should be washed with a strong solution of nitrate of silver."

Another experienced breeder says:—"I have no idea how they come and what causes them, but they pay me an occasional visit, generally about the spring time. So far I have been very successful in checking them if I get on early, with raw castor oil. Rub this on amongst them every day. I have also used sulphuric acid, but this needs to be used with care. On no account let it get near the eyes; paint it with a feather over the warts occasionally. It is very painful to the beast if the warts are large and you put on too much. It burns them out to the roots."

[We shall be glad to receive other opinions.—Ed.]

The South African Meercat and the Rabbit Pest.

To the Editor.

Sir,—I have always read with great interest your remarks on the rabbit pest in your wonderful country, and especially the suggestions put forward from time to time for its mitigation. I realise that the question is a big one with you, and I feel great diffidence in venturing a suggestion at all, as it is obvious that you have sifted the universe for remedies with apparently only a degree of mitigation obtained. However, you can only say "he is a 'D.F. South African,' and knows nothing about rabbits," which is true, and thank God on both counts! So here goes.

From what I am able to deduce from your writings about the rabbit in Australia, it seems that not only have you to "proof fence," and kill the rabbit inside the fence, but you have to keep on killing him, or all your previous efforts go for naught. Now it seems to me that once you have reached the "free" stage, if you could find some means of keeping "free," a considerable stride will have been made.

In South Africa we have no rabbits. Why? This is not because they have not been introduced into this country in the same way as has been the case in Australia. Many people in this country keep rabbits as pets, and when kept

in hutches or enclosed they increase alarmingly. Not infrequently rabbits escape from the runs on to the veld, where if unchecked they should breed just as rapidly as in the enclosures, but they are never heard of again. Why not?

Some years ago in the Free State a boy who had bred up rabbits, and got tired of them, as boys will, turned 170 loose on to the veld. Yet to-day there is not a rabbit to be seen in that neighbourhood. In the Transvaal a tenant of mine left me a legacy of thirty odd rabbits loose on the veld which he had vacated, and as the soil there is of a sandy nature, with a 26-in. rainfall, I greatly feared that I would have trouble, but in a very short time there was not one to be seen, and so on similar cases of rabbit introduction can be recited all over this sub-continent. The climate is just "it" for rabbits, soil and feed ditto, as is shown by the rapid increase made by them when enclosed or protected; yet nowhere in South Africa are rabbits found on the veld. Again, why not?

The reason why is this: In South Africa we have numbers of small wild carnivora, in the shape of meercats (*Cynictis Pencilata*), a species of mongoose, which are fierce and indefatigable little hunters, and not only kill above ground, but follow their prey to earth, and kill for the mere pleasure of killing. They usually hunt in couples, or singly, but sometimes three may be seen together, seldom more. So they divide their energies, and cover a large area. They will tackle most things smaller or as small as themselves, and if cornered will put up a good fight even against a fox terrier. They are not climbers. They hunt by day only (as far as I know), and have a good turn of speed for a short distance. They have a slender, wiry body, and can turn somersaults in a rabbit warren, and in two twos they have the adult rabbit laid out, and have "scoffed" the youngsters, or merely killed them for fun, and are off on the next hunt.

The meercat never seems to rest outside his hole, and covers miles of country with an easy sliding trot, and once he locates a family of partridges or other ground game, their "numbers are up" unless they can fly; hiding or going "down" is no use. Mr. Meercat has keen scent, and will rout them up or out as the case may be one after another.

The meercat causes us no trouble in this country with lambs or poultry. I never have had a lamb killed by meercats either during the day or night, and as chickens are always round the homestead, where there are usually some dogs about, they are out of Mr. Meercat's beat, as he is quite a shy little animal, and does not keep up a nodding acquaintance with the canine tribe.

Now it has occurred to me (and I give it to you for what it is worth) that if you good people could put down a few families of meercats (*Cynictis Pencilata*) on "cleared" areas, any stray rabbits who happened to find their way on to such areas would have but a poor chance of starting housekeeping. I would go even further (being but a "D.F. South African"), and say that if Mr. Meercat were put down even in moderately infested country he would make it his business to reduce the rabbit population to the point of extinction.

The meercat does not take readily to carrion, and goes for mice, beetles, worms, and small birds when the supply of large game runs short, and is always able to knock out a living and keep himself fit, but wouldn't he just do a tango amongst the rabbits?

Of course, it is for you "over yonder" to say if this suggestion is worth consideration, or if it would be merely a case of "feeding a hippo on acid drops," or for you, Mr. Editor, in your wisdom, to strangle it ere it sees the light of your proof sheets.

One other point, should you over yonder consider the idea worth perusing, and think of introducing Mr. Meercat to Australia, first cause full inquiries to be made amongst responsible naturalists as to the possibility of his becoming a pest with you (he will very likely become a pest to sportsmen, that is, bird shots, for where he takes up his residence partridges and other ground game find it expedient to vacate), and in this connection I would specially recommend you to communicate with the Director of the Natural His-

tory Museum at Port Elizabeth, Mr. Fitz-Simons, who is undoubtedly the greatest living authority on South African fauna.—I am, Sir, &c.,

J. COLE ROUS.

Stradbroke, P.O. Tafelberg, C.P., South Africa,
2nd April, 1921.

South African Conditions.

To the Editor.

Sir,—Northern Karroo, and no doubt all sheep farmers, are having financial troubles. The wool market is dead, and the product only saleable at sacrifice prices. Stock of all kinds are low in price. Banks are not anxious to increase their note circulation, as the Act that required the banks to have 40 per cent. of gold reserve, and which had not been enforced during the war, is now again enforced, and the banks must have gold or gold certificates; it follows that as gold is dear it is "business" to reduce the note circulation. We farmers wonder how things will end, with retrenchment everywhere; but the average farmer is an optimistic sort of being, and now that good rains have fallen, droughts being banished for the time being, he goes along with the hope that the wool market and stock market will improve and better times will come.

The South African farmer had a good time during the war years—1914-1919. He had high prices for his wool, and stock of all kinds commanded high prices; good wethers made from 40s. to 50s.; ewes made from 40s. to 60s. Magistrates, one or two of them, reported in their annual reports that farmers were spending their money in buying motor cars and neglecting to pay off their bonds. Yes, some of us did buy cars with the money we earned, and thus made the long distances to and from the town somewhat shorter, but we did not waste our money on cars. We did not purchase cars "de luxe"; we bought, for the greater part cars for hard work, and did not go for long pleasure tours. It is true few of us paid off our bonds, but we made some improvements on our farms, and in other cases paid off old accounts and promissory notes.

But all this does not explain the entire absence of money. In the year 1919-20 we had one of the worst droughts on record, and when the rain came in February 1920 most young stock had perished, and the early lambing season could be nothing else than a total failure. Farmers now found themselves with partially depleted farms, no prospect of early lambs, the wool market good, and slaughter stock commanding high prices. All things seemed so promising that they bought store wethers or breeding ewes at high prices. Some bought farms at high figures. Do not think for one moment that the only reason for buying expensive common breeding or other stock was the depleted farms. No, the "super profits" and "excess profits" taxes were staring farmers in the face. We were told that these taxes would cease six months after peace, and to evade them we purchased stock to carry us over. Well, store wethers and other stock dropped; wethers for which 40s. and more was paid had later to be sold at 20s., and to-day the same class of wether is making from 10s. to 15s. Wool, too, dropped, and became practically unsaleable unless at a sacrifice.

I was present recently at an insolvent sale, when Merino ewes made 8s. 6d., with six months' credit without interest. Cape sheep with weaner lambs in good condition made 8s. 6d., all to count, at a recent stock fair at De Aar. A large quantity of young stock perished in the drought of 1919-20, and it appears probable that the price of slaughter animals must rise after the winter, say September-October.

During the few preceding years our farmers have purchased from Australia a good number of high-grade rams and ewes. This was done with the no doubt laudable desire to improve stock, but also undoubtedly to get out of the super and excess profits income taxes. I have no hesitation in writing that the purchases in Australia for African account will be very small for this and the ensuing year.—I am, Sir, &c.,

HEXAGON.

Cape Province, South Africa, 28th March, 1921.

Cockies.

To the Editor.

Sir,—I don't think it has ever been put on record how this endearing diminutive came to be fastened upon so large and worthy a section of the primary producers of this country, and so give the following suggestion in the hope that it may fill the bill.

The term originated, I think, in my native State of South Australia, and was applied not to the original wheat growers, but to those who went out in the later seventies and early eighties to grow wheat in the saltbush areas outside of Goyder's line.

Their method of cultivation was simple—after clearing off the saltbush they ran a scarifier over the land and broadcasted the seed.

As these holdings abutted on the main stock routes, which had been used for so many years by Queensland cattle drovers en route for the Adelaide market, and as the farmers had no fences, it is only reasonable to suppose that a certain amount of friction would arise between the parties concerned with quite a liberal exchange of sentiment.

Now, up on the flooded flats in the Cooper's Creek country when the waters subside vast flocks of white cockatoos descend upon the country scratching for roots, and acres of it look like a cultivated field when they have finished with it.

So you can well understand the drover concluding his argument as follows:—"Call yourself a farmer! You're only a bally cockatoo! Why I've seen them on the Cooper make a darned sight better job of scratchin' than you do!"

This is my idea of it; it would be interesting to know if there is a better.—I am, Sir, &c.,

J. C. WARREN.

Dyliabing, Katanning, W.A., 19th April, 1921.

Wild Dogs and Rabbits.

To the Editor.

Sir,—Referring to Mr. Jim Parker's letter in your last (April) issue, I have already proven the Rodier method of rabbit destruction to be most successful, and at my own expense, and I am not going to do it again at my own cost.

The scheme itself is an absolute certainty, free from all drawbacks, and the cheapest, and sooner or later must become general. When that will be depends on the landowners themselves. How much will Mr. Parker give towards a further trial, say, on an island or elsewhere?—I am, Sir, &c.,

WM. RODIER.

Melbourne, 27th April, 1921.

Preparturient Paralysis in Ewes.

Veterinarians of the University of California report as follows on the above disease, which they have been investigating:—

It attacks fat ewes several days before due to lamb. The cause of the disease has not been definitely determined, but lack of exercise and overfeeding of animals in such condition are no doubt primarily responsible for the trouble. The affected ewes are dull, listless and aimless in their movements. In advanced stages there is loss of vision, staggering gait or inability to rise. After five to eight days of illness, the animal usually dies.

Prevention has been successful and consists in avoiding conditions that make for the excessive deposition of fat. This can be done by limiting the amount of dry feed given to ewes during the last month of pregnancy, and making them rustle for their feed to give them plenty of exercise. Grazing in pastures containing green feed for one or two hours a day will have the effect of giving them succulent food and exercise at the same time.

The ill effects of heavy feeding and lack of exercise are not always confined to the ewes. When sheep in fat condition begin to die, it is usually advisable to move the animals and to change and reduce the feed.

Motor Notes.

BY "GNOME."

Last month we touched lightly upon the subject of that evil, the Captain Kidd of the motor repair world. One mentions that he touched upon it lightly, but there have been times when a chap has felt that he could, with the greatest of ease, pick up a belaying pin or a waddy and wield it with no little weight over the heads of a lot of these pirates.

When a tuner and tester in the pre-war days, there was nothing that exasperated me more than to have a car sent down from the workshop marked O.K. by the foreman when there were some glaring omissions in the work, which was supposed to have been inspected by the foreman before he attached the yellow ticket. Being an enthusiast, and at the same time never losing sight of the firm's name, this kind of thing used to drive me into a blue fit, which was not at all good for the system, but as I got older I learnt to control these outbursts, though if there is anything that really will drive me off at a tangent it is the factor of inefficiency. It is really horrible to watch men at work who call themselves mechanics or motor drivers—the loud-voiced type, you know—who draw a large salary in comparison to the bad service given in return, and yet still growl at the "starving wage" which they receive.

It is really wicked, and one is very much afraid that unless very great care is taken, the same trouble will creep in where the aeroplane is concerned. Australia already possesses some of the finest aeroplane mechanics in the world, and also some of the worst, but the worst get the plum jobs that are going, as influence works them into the position. One man known to me was before the war a cocky somewhere in New South Wales. He joined up with some unit or other, and finally transferred to the Flying Corps. In time he managed to get on to the mechanical side of things, and at the end of the circus was looked upon as a first-class mechanic. But the type of work he turned out once felt under my eye, and chatting about him to an admirer of his said: "But really, he is not a mechanic in the true sense of the word. He has not served his time to start with." "Oh, yes, he has," was the reply, "he served it at the war." Of course, the thing is really too absurd, and beyond further comment. But in my own humble opinion, if there was any unit that tended to make a man inefficient, then it was the Flying Corps, as there were so many N.C.O.'s keeping a watchful eye over everything that if a man was in doubt or made a botch of a thing, the N.C.O. would rectify it himself or into the workshop it would go. Unfortunately, a great number of these so-called mechanics have returned to open up their own repair shops in some country towns, and to a certain extent get a considerable amount of trade on the strength of being returned men. What is the result? They go "hung," sell out to another returned man, who is the "pukka" mechanic, but he eventually goes smash because the motoring public have lost faith in the returned garage proprietor.

Do you see how unfair the whole thing is, not only to the honest man, but to the car owner as well. I tell you, that the job of Controller of Civil Aviation is no sinecure to start with, and the only way to get down to bedrock and start off in a thorough businesslike manner is to be firm, and cut out any influential favouritism. Of course, you will say that this is a different matter altogether when compared with motor car repairs. With the aeroplane it is a matter of life and death. Yes, quite right, but you know, the neglect of fitting a split pin into the steering or on a front wheel can have just as disastrous effects. But apart from that, there is the question of honesty, or is it dishonesty?

A poor unfortunate devil with an empty stomach finds it hard to find a job in time to alleviate the pangs of hunger.

Some of you have probably experienced this particular ailment; I have, and know what it means. And so in desperation this fellow helps himself to a loaf of bread out of a standing baker's cart, is "pinched," run up before the "Beak," and sentenced to hard labour, if "His Nibs" is in an unsympathetic mood. Keeping such a case in mind, compare it with the repair man who does what he calls a complete overhaul. You take the car out and find that she is about 50 per cent. below expectations, and return it to the man who did the job, with the usual kick. He messes about, and makes things worse, if anything, but you take delivery with the assurance that after she has run 500 miles or so everything will have worked well in, and she will be developing her full power.

But things go from bad to worse, and in desperation you take the bus to another man with a fair reputation. He gets down to the thing properly, and probably diagnoses the trouble as a choked silencer. Of course, he has to be paid as well as the first man, who quoted you at least £75 for the overhaul, and when you have the usual wrangle over the account with the latter gentleman, explaining to him that he had not overhauled the silencer, he simply makes some excuse about a bad mechanic that he was employing at the time, who had since been "spearred," and that is all the satisfaction you get. And so the show goes on, and the long-suffering motoring public at first swear, then pay, and after the second or third man has cured the trouble they smile. But still the robber carries on unmolested at his nefarious trade.

There are quite a number of correspondents—readers of this journal—who correspond with me, and the majority of them write very interesting letters, but it is amazing how many of them have flattered me by taking up a pen when their own local mechanic has just about tied himself and the car in a 'orrible knot. Here is one that may be of interest to you:—

"As a subscriber to The Review and a car owner and driver, I always read with interest your motor notes. I am enclosing a stamped addressed envelope in case you may feel inclined to reply personally, but if you feel disposed to give the information in a future article I would deem it a favour if you did not mention the owner's name. The car in question is a 1916 model Hupmobile, and when having the generator replaced after having undergone repairs, the chain driving the cam shaft became disengaged through an error, and had to be rectified. Of course, this meant re-timing the engine, which was done, and since then the engine has been running hot, and very frequently pops back through the carburettor. I have had it readjusted again, the cam driving cog being advanced one tooth, as it was thought the valves were opening too late. However, the running is still far from normal, the engine continuing to run hot and pop through the carburettor. In consequence, I would be pleased to have your opinion on the matter.

"As an amateur, I am inclined to think that the valves may be timed too early, and the heating is caused through the engine not clearing her exhaust gases thoroughly. Which would cause the most heating, too early or too late timing of the valves? And also, what effect would late timing of the magneto have on an engine? If you can find the time I would be pleased to have your opinion of the correct timing of the valves, and also that of the magneto. As one who lives in a country district, and has to avail oneself of the services of local garages, I very much appreciate the articles written by you, and always put them to one side for reference. As a result of this little trouble with my car, I have been looking over some of the back articles in the hopes of securing the desired information, but as it has not been forthcoming I finally decided to write to you. In ending, it may be as well to mention that prior to having the car attended to, the engine was running O.K., and as cool as the proverbial cucumber."

Well, that's that. The last sentence covers a multitude of sins, does it not? And strange to say, the majority of my correspondents when writing for information about a trouble that has usually been brought about by the bad manipulation of the Garage Pirate, generally fail to make mention of the behaviour of the car before it was sent in. In this case the writer of the above letter saved me the

time and trouble of having to write and ask if the engine showed signs of overheating before going in for attention.

Now to get down to the job. You will recall the sentence wherein mention is made that "it was thought the valves were opening too late." Now, the repair man who does the job is paid to use his brains when carrying out the work, and not to have his attention drawn to a fault that makes him think an alteration may make a difference. He should think as the work goes on, and when it comes to a matter of valve timing I can assure you when the job is being done by myself I do not simply rely upon the marking on the gear wheels, but check it off on the piston, not only once, but very often two to three times. This may sound a little far fetched, but it is the easiest matter in the world to slip a tooth, and there is nothing more hurtful to my feelings than to have a job brought back to me because of sheer carelessness. But as far as one can see to-day the majority of pirates only think of getting the car out of the place so as to make room for another victim, and also, of course, to get the good cheque well and truly banked.

As to the overheating, this points to the valves without doubt, as one gets a red hot clue through the medium of the timing having been adjusted in a faulty manner at the very commencement.

Most cases of overheating through valves occur when the valves are closing early, though I have had a case of bad overheating with very late valve timing, but the error is generally on the other side. And nothing will set up boiling and loss of power quicker than a late firing magneto. A late magneto, plus faulty valve timing, would just be about the dizzy limit, and yet it is wonderful how some car engines struggle on with their work sometimes for weeks on end.

Now, as regards the timing of the Hupmobile. At present my situation is on the south-east coast of Australia, and for the life of me my memory will not recall the type of car that the 1916 Hup. is rated. But to make trebly sure I am giving you the timing of three models which may be of interest to other users of this make of car. Here it is:—

Model.	Inlet Opens.	Inlet Closes.	Exhaust Opens.	Exhaust Closes
10 ...	3 1/2 ins.	4 15/64 ins.	4 27/32 ins.	2 27/64 ins.
K. & N. Top dead centre	8 1/2 ins.	8 1/2 ins.	5 9/32 ins.	1 1/16 ins.
32 ...	3 9/32 ins.	4 37/64 ins.	5 15/64 ins.	2 39/64 ins.

The spark should occur on the Model 20, with the spark retarded 3/4 of an inch after top dead centre. The K and N model, 2 ins. before top with the igniter in neutral position, and on the 32 Model 13-32nds after top dead centre with the spark lever retarded.

Now, with the Model 20 if we desire to check off the valve timing the flywheel is rotated in the direction of motion until the exhaust valve of the first cylinder, let us say, is just closing. This is to give a rough location of the piston. Then the piston is manipulated until it is exactly on the top dead centre, and on the very top of the flywheel we pencil a line transversely across the rim. We then measure off 3 1/2 ins. on the side of the line opposite the direction of motion. Then turn the flywheel in the direction of motion until the 3 1/2 inch mark comes up to the top of the flywheel, and check the position of the inlet valve. This should just be closed. Having checked the inlet we can now turn the flywheel back to the top dead centre mark again, and pencil off 2 27/64ths ins. The flywheel is again rotated in the direction of motion until the last measurement just made is on the top of the flywheel. The exhaust valve should have then just closed.

To do the job really thoroughly it requires two hands at the game, one to manipulate the flywheel, and the other to watch the valves.

And the magneto is, of course, operated in the same manner, only the pencilling may be before or after the top dead centre of the flywheel. However, it is simple enough, providing that one goes about it steadily, uses plenty of patience, and makes a careful check after the job is completed.

Well, I have a lot of flying to do during the next day or two, so cheerio! But write as often as you like.

Literary Supplement.

Sporting Notes.

BY "FIFE AND DRUM."

Warrnambool Races.

I have seen Naples and did not die, and now I have seen Warrnambool Grand Annual Steeplechase, so there can be very little left to live for. And really and truly it has been a charming experience. Nearly everything about it has been as close to perfection as we can expect to find in this valley of tears, and I must tell you something about it.

Warrnambool, we hear, is full to overflowing, and so, after leaving the train at the base of the old Elephant, we motored across the plains, looking grey and solemn with their black plantations waving like funeral plumes, to the township of Mortlake, a convenient half-way house to the scene of action. To those who meditate the excursion next year let me tender the advice to follow our example. The inns are comfortable at least I can swear to the excellence of ours, and you have only a 30-mile motor spin over a capital road in the morning air to enable you to reach the course. All sorts of recollections and impressions come to us as we hum along. Let me tell you of one.

In the long ago of the early fifties an immigrant from the old land settled down here at what is now called Darlington, but what was then the Elephant Bridge. Some time afterwards a traveller from England came to Australia with a letter of introduction to the earlier arrival. The letter was addressed to "Mr. So and So, Elephant Bridge, Victoria." This was undelivered, but forty years afterwards, the traveller, now living in England, discovered the letter in its unopened envelope, and out of curiosity to see what would happen, posted it with the address entirely unaltered. In due course of time it was delivered to the addressee, by this time a squatter in Riverina, and the letter answered to the original giver of the introduction. It was received by him and acknowledged. What do you think of that, after the lapse of nearly half a century—all three parties still then alive, and traced out by the efficient hand of the post? But if we once commence stories of this sort we will never reach the steeplechase, and, as it is, we will skip over the first two days of the race meeting, the Brierly Steeplechase day and the Warrnambool Amateur Club's gathering.

The Amateur Day had been ushered in with thunderings and lightnings and heavy rain on the coast, so that myself and my kind host had abandoned the whole business, and had motored home the full sixty miles. But Steeplechase Day broke so very bright, and so warm, and so altogether delectable, that we took heart of grace, and were off again on the long trek by half-past nine, enjoying ourselves with the zest of school boys. The entire proceedings bordered on the ideal. The previous day's rain had already washed the greyness from off the face of the plains, and these were commencing to flush with a faint green, and their scent was sweet as honey. The long dark plantations had lost their sombre aspect, and now only suggested grateful shelter and shade for flock and herd.

As we drew nearer to the city by the sea the character of the country completely changed. The tentacles of many coastal showers had never quite ceased from laying their cool damp fingers on the fields, and everything here was a vivid green, and the little hills and dales, the hedges and ditches, and the trees all made you feel as though you had never left the old homeland. And there ahead of us is that unmistakable glint in the air, while the roll and lie of the land, and the formation of cloud tell you, without any mistake, that you are drawing close to the grey sea banks. And now motors by the score commenced to pass us or to be passed. Every by-road poured forth car and jinker and horse-drawn conveyance of all sorts, each one making for the Mecca of the day. And there is old Ocean himself at

st, blue and still. The crowd of vehicles augments each moment, and we are immersed, in the space of what seems like only a minute, from out of the silence of nature in the vast western plains into the crowd and busy hum of men. The contrast gives one quite an odd feeling.

You tell me you never saw the course? Well, it lies at the bottom of a big, shallow cup, within a very short distance of the heart of the city, but for all that you can see of the town you might as well be miles away in the country. The arrangements cannot well be improved upon. There is a large paddock for motors, which, however, one can easily pretend, will have to be increased to double its present size during the next dozen years. From there you pass into a lovely lawn, with an abundance of flower beds, well tended and bright with colour. The stand rises from a grassy ramp, and above that is the Hill, from which you get a magnificent view of the course. The saddling paddock is good, containing ample shade, and the stalls are capital. The offices are all right, but if one is forced to find fault anywhere at all, these were a little apt to be crowded with unofficial visitors, a circumstance which is a little apt to lead to delay and a certain amount of unpunctuality.

We opened proceedings to-day with the Union Handicap, a race confined to two and three year olds. Antarctic, who looked a picture of health and condition, made an example of the field that dared to oppose him. He had already won the Wangoom Handicap on the opening day in a common effort in the record for the course of 1.13, and had been first at the post in a race at the Amateur Meeting. With his penalty he was now carrying the welter of 10 stone 13, and even with this on his back it seemed as though it was merely a matter of getting away for him to repeat his form in the Wangoom. Mr. Tozer was starting in capital form, and he sent the field off well together, and with Antarctic as smart on his feet as any of them. One need say no more, and the race requires no further description. Antarctic won in a common or garden trot, and the change of air, the outing, and his easy victories, ought to do the horse an immense amount of good. On his form at present there is no race which might be beyond him. He has thickened and tightened up surprisingly, and Mr. H. L. Lumming is having quite a lot of fun and profit out of him.

As soon as this race was over I took a walk round the steeplechase course, partly to satisfy my own curiosity, and partly in order that I might tell you exactly what it is like. It was almost a summer's day, so powerful were the rays of the sun, but the turf was springy, cool to the feet after the heavy rain, and with my coat off, and all by myself, I thoroughly enjoyed the perambulation.

I am going out of my way to tell you about it, for the course is quite a unique one, and, as the years roll on, I can well imagine that the importance of the fixture will increase, until the Warrnambool Grand Annual will rank only second to the Grand National and the Australian Steeplechases. If only the accommodation of the town and neighbourhood were elastic enough to absorb the visitors, the executive might quite reasonably, even now, increase the value of their prize to the cool thousand, and in a few years to fifteen hundred. It all resolves itself into a question of house room. But come along, and do stop yabbering.

We make a commencement at the starting post of the steeple, and the first fence is a good, stout post and rail, just about the same height, so far as you can judge by the eye, as the obstacles of a similar nature at Flemington. It, as well as all the other post and rails, is well padded on top, but might be a little more amply brushed up below. There is nothing really to find fault with, but I do like to see the rushing thick, pretty deep, and fairly high. A horse gets such a capital sight of his fence, and can time his take off so much easier if the brushing is as I have described. I know that many people think differently. I believe the late Mr. Godfrey Watson used to say that it was artificial, and that horses ought to be able to time themselves with naked fences, and that they do not meet with brushed obstacles in the hunting field. No, neither they do, but neither do they go to the pace, nor do they have to jump when pumped out, thoroughly winded, and their vision utterly upset.

Next comes a brush, at the bottom of the straight, and a

well-made-up fence it is, too. I may say, as we go along, that we are travelling with the turns to the right hand. The exigencies of the course demand that the steeplechase should be run this, the reverse way. After the brush we arrive at what the Irishmen, and they are in their legions in this neighbourhood, euphoniously and almost lovingly describe as "the thribble foreint the shtands." This comprises a post and rail, a stone wall, of the real cathedral variety, capped with wood, and a log fence. The turf is excellent, and the taking off and landing perfection. There is a good stretch of galloping now before we jump out of the course, over the double at the road, and go into the country. The leaps here are the ordinary post and rails, and the road is exactly 39 yards across, but a horse must be clever, as on landing he rises on to the crown of the thoroughfare, and then descends to the take off for the second of the double. It makes a thoroughly fair hunting obstacle. We now turn to the right, and commence the ascent of the cup in which the course lies, taking three good plain fences as we go, and when we reach the crown of the rise we turn pretty abruptly and make for the second road double on the top of the hill. After clearing this we commence the descent towards the racecourse, clearing the usual type of post and rail on a fairly steep incline, and, with that becoming more abrupt as we go, we take the double over "Tozer's-road." The fences are low enough here, the first a sod dyke strengthened by timber, and the second a stout brush. But the full width of road is barely 20 yards, and with the pace on there is only room for two strides between landing and taking off. No sooner have you negotiated this leap than you turn, nearly at a right angle, to the left hand on to the course, where you meet with another post and rail, and so commence the second round.

When I had completed my walk I happened to meet one of the officials, who asked me what I thought of the course. I said that I would like it to be a little longer, the jumps a little bigger, and the added money fifteen hundred. After seeing the race, I retract the remark about the distance. With thirty stiff obstacles to surmount, that is far enough for the greatest glutton. I should like the fences to be a little higher in order, if possible, to reduce the pace, and I would very dearly love to see a big Punchestown double, bank and ditch, in place of the stone wall "foreint the shtands." I fear, however, it is asking an impossibility, unless other managements followed suit, for men would scarcely be expected to school their horses for a single event during the year. But if Flemington and Caulfield, Moonee Valley and Williamstown adopted this pattern of "lep," it would be a great attraction to the jump-loving public, and would, above all other fences, tend to reduce the break-neck pace of the present-day steeplechasing.

So now we will take a look at the Grand Annual itself. There were ten starters, which would have been increased to a dozen probably, but for mishaps to Rua, who was killed, and to Tarmoola, a fine-looking gelding, in the Brierly Steeplechase on the opening day. There was Tararu Jack, a higher class horse than we usually see down here. Mr. Leslie Stuart, who was present to watch the sport, was a little anxious in case the quick doubles might find Jack out, for he is a free jumper that covers a great deal of ground. Yarram Lea had run second in the Brierly, after looking all over a winner at the last fence. Cotswold we saw in form the other day at Moonee Valley, and he had run third, but beaten half-a-dozen lengths in the Brierly. Was he likely to see out the extra mile? We saw him once, you will perhaps recollect, win from start to finish in the three mile and a furlong steeple at headquarters. Bloodstain had tumbled the first day, giving his amateur rider, Mr. Harry le Roux, a nasty fall. That enthusiastic huntsman and gentleman jock was so stiff in the neck this morning that he reluctantly was forced to give over the guidance of his little horse to the professional, T. Glennon. Calula was looking none the worse for his exertions on Tuesday, and, even with his penalty, seemed to have a capital chance to-day. Donald Trent is too slow for a fast-run race, safe jumper though he usually be. Ruralist was very light on it, and scarcely looked like staying out a fast-run three miles, but good old Roman-nosed Bricks should have a chance, one thought, with nine stone. What Next

finished fourth in the Brierly, and might have a show now, but Cail I could not fancy much. And that completed the field.

In spite of the over-anxiety of some of the riders to get away in front, Mr. Tozer effected an admirable start, and off they streamed for the great event of Warrnambool's year. Yarram Lea was our fancy, but at the first of the treble down he came a regular mucker, stripping himself of both his rider and his saddle, but rising and joining the field all the way round with dangling reins. Cotswold has a strong lead already, and is jumping like a greyhound. Calula follows him, and then Bloodstain, with the rest close at his heels. Now disaster begins to overtake the majority. Mr. Stuart was only too correct in his apprehensions regarding Tararu Jack. Bricks unexpectedly nearly comes a header at the second fence in the country, and is pulled up. Donald Trent is not in sight as they come into the straight to commence the second round, where Cotswold is still going great guns, holding a very long lead, and Calula is next, gamely trying to reduce the gap, with Bloodstain a good third, and jumping well. Ruralist, Cail, and What Next are the only other survivors. At the first road double, where he fell on Tuesday, Bloodstain again strikes trouble, and it is a match between Calula and Cotswold. We know Cotswold has always been a beggar to stop, but Calula is doing all he knows, and can make little or no impression on his leader. I never saw prettier lepping. Cotswold goes in and out with all the precision of machinery, and before they arrive on the race-course it is manifest that his follower can never catch him. What Next comes down at the first fence on the course, and Ruralist has already paid the penalty on the hill. Both leaders are very tired as they make the run in, but Cotswold has a too-long lead, and wins actually pulling up. Calula is so leg weary that he can scarcely crawl home, and What Next, remounted, secures third money amongst hearty cheers. His would apparently have been a popular win if so the Fates had willed it. Cail is the only other competitor to complete the course.

And so that was the end of the Grand Annual, and I strongly advise you to make one of the number of spectators next year if it be possible. Nay, more, bring a horse, and try to win. You must have a very perfect jumper, and one with a bit of pace. But the fencing is the thing. Bring a finished clean-bred hunter, who has also taken his degree over Flemington, and you may do wonders here. A horse like the old Wave, with a few years subtracted from his tally, would fairly revel in it.

Now take a look at the Cup. There was a good field of fourteen, and it contained many performers with which we are well acquainted in the metropolis. Adam Lindsay, Purser, Rahda, Herston, Ceridwen, Well Off, Admiral Collingwood, Fantarie, Impeyan, and Valaster are all old friends, and the field was strengthened by Lady Widderin, who ran well; Spring Mist, a very fine Shepherd King gelding belonging to Mr. H. D. Parkinson; and Mr. A. McLean's Curion. It was a lovely race. In spite of a hot pace almost everything was within striking distance until heads were turned for home, when Purser, with a penalty for a win on Tuesday, shot out and won cleverly with Duncan in the saddle. And that ended my delightful experience of Warrnambool. I have said that there was a big crowd, and I might have added that there was a large Melbourne contingent which swelled it considerably. I saw Mr. Leslie Stuart and Mr. A. T. Clarke, Mr. Harold Armitage, Mr. Ronald Murray and Mr. J. H. Murray, Mr. M. Sheldon, and Mr. A. J. Staughton, whose foot, of course, was on his native heath down here, Mr. J. A. McLeod, with many others, amateur and professional.

I wish I could tell you all the prominent and well-known Western District people who were so palpably enjoying the lovely weather and the fun. But one noticed Mr. G. J. Officer, keen, as usual, upon talking pedigrees and horse flesh in general. Then there was his brother, Mr. A. P. Officer, and Mr. R. A. Affleck, who officiated with faultless ease as judge. There was Mr. J. L. Currie, perfectly recovered from the effects of fighting an appendix, which has now been mercifully left behind. Mr. William Lindsay is president of both clubs this year, Amateur and the Warrnambool Racing Clubs. This, I believe, is an unusual, perhaps

unique, distinction. He makes an ideal president. Mr. W. Moffat won the Hopkins Hurdle with Bill Bluster, let us hope the forerunner to victories in more distinguished company. There were Mr. and Mrs. E. Thornley, who, with Mrs. Boyd, lavished much hospitality upon hosts of visitors and friends. One could linger long over battalions of well-known, well-liked names, all of which are redolent of the West—Mr. and Mrs. Ardlie (whose afternoon tea was a treat), Mr. and Mrs. George Dowling and Miss Dowling, Mr. G. H. Whitehead, of Goodwood (so well known, amongst other things, for his Tam o' Shanter breed of pony); Colonel and Mrs. Pape, Mr. Charles McMeekin, and Messrs. E. de Little, S. F. Mann, Mr. James Dickson and Mrs. Dickson, and Mr. L. G. McArthur.

By the bye, I had the pleasure of talking to one who had actually ridden Panic. He rode him with his rugs on, and on top of the surcingle. This was loose, and when the wind flapped the clothing the old fellow took it into his head, and went to market, his little rider hooking his arm beneath the surcingle to keep himself safe aboard. This was Mr. C. Phillips. Then, too, there were Messrs. James Boyd, P. H. Lock, Tom Mackellar, Claude Palmer, Edward Manifold (with recollections of the performances of Coradji and others in his ownership over this famous course), and Mr. and Mrs. W. B. Cumming and Ronald Cumming. I had a long yarn with Mr. D. O'Brien, who had won the Grand Annual, I think, three times at least, and was full of most interesting reminiscences of the meeting and everything and everyone connected with it.

And there was Mr. R. A. D. Hood, who suffered a loss in Rua, a gelding whose dam I bred myself, a very dear little mare named Light o' Love. I was sad, for old time's sake, to see the gelding die. And one of the most interesting men to talk to was Mr. Sam Tozer, whose father planned this course, and whose colours, white and blue, were once so prominent here. They are now used by Mr. A. McLean, Mr. Tozer's brother-in-law. By the bye, Mr. James White "jumped" the Tozer banner when he "took silk," and I am not perfectly sure if he has been forgiven by the Warrnambool district to this hour. I wish they had been more successful to-day than they were. And I had the pleasure of meeting Mr. A. H. Davis, secretary of both clubs. He has everything quite apple pie, and, like all good men of business, is never in a hurry. But there, we must put the brake on. We have a long drive before us ere we reach home, and an interesting experience it was, visiting as many things in the town as we possibly could before finally setting our heads for the north-west passage across the plains. I could tell you a great deal of the very lovely effects of light and shade as we spun on in the gathering twilight and the rising of the stars, and the thickening of the gloom, until, once more, we came within the influence of that blacker shadow yet against the dark sky, Mt. Elephant, and realised that our holiday to the Western District was over, and that another year must fly before we can hope for such another. And what may have happened before that?

But you lady pastoralists say I have forgotten to mention the ladies and the dresses and all that. Well, the dresses were—everyone was so well dressed, so tastefully dressed, that I never noticed what anyone wore. And that is the truest of all tests of good dressing amongst ladies. And the girls! Oh! they were pretty. The girls of Warrnambool and the west are very pretty. And I ought to know, at my age, and I do know. Au revoir until next year.

Blood Sires.

BY "FIVE AND DRUM."

Poetical (imp.).

Poetical is a bay or brown horse ten years old, imported. He is the property of Mr. M. W. Roberts, Dandarragan, W.A., and he could gallop a good bit. He won five races out in the West, including the Serpentine Handicap, Hannans Handicap, and Helena Vale First-class Plate. And he was

placed ten times, including a second in Melbourne in Railway High Weight Handicap on Cup Day. He is a particularly lengthy, stout individual, and he was a sound horse, racing as he did until he was rising six. Four of his progeny have raced, and of these three have been placed, and one Phobie, is a winner, having been successful in the Initial Stakes at the W.A.T.C. meeting. This is quite promising, and if the horse gets a chance over there, I see no reason why he should not sire excellent horses. The main feature of his blood lines is that he is strong in Touchstone and Stockwell, and has but the one strain of St. Simon. He will be easy to mate, as we have almost a plethora of the latter nowadays, and it stands a lot of in-breeding, too. We used to think otherwise, but that is all changed now. Over in-breeding means fractiousness, but that holds good of any strain, and not only of the Galopin-St. Simon blood. Poetical, by the way, won the first and champion prizes at the last Perth Royal Show.

POETICAL, bay or brown, 1911.	Melton (3)	Master Kildare (3)	Lord Ronald (7)	Stockwell (3)	The Baron (24) Pocahontas
				Edith	Newminster (8) Deidamia
		Silk	Plum Pudding (3)	Sweetmeat (21) Foinnualla	
				Judy Go	Dey of Algiers (4) Cacique
	Violet Melrose	Scottish Chief (12)	Lord of the Isles (4)	Touchstone (14) Fair Ellen	[(11) The Little Known Bay Missy
				Miss Anne	
		Violet	Thormanby (4)	Windhound (3) Alice Hawthorn	
				Woodbine	Stockwell (3) Honeysuckle
	St. Simon (11)	Galopin (3)	Velette (19)	Volteigneur (2) Mrs. Ridgway	[man (3) The Flying Dutch- Merope
				Flying Duchess	
	Social (31)	St. Angela	King Tom (3)	Harkaway (3) Pocahontas	
				Adeline	Ion (4) Little Fairy
	Gay Duchess	Rosierucian (5)	Beadsman (13)	Weatherbit (12) Mendicant	
				Madame Eglantine	Cowl (2) Diversion
		Bonnie Katie	King of Trumps (2)	Velocipede (3) Mrs. Gill	
				Basquine	Orlando (13) Canezon

Owner, Mr. M. W. Roberts, Dandarragan, W.A.

Magpie (imp.).

Here is one of the finest photographs which we have reproduced in our gallery. And it is the picture of one of the best horses into the bargain. He is a very good looking horse. Plenty of size, covers lots of ground, stout, muscular, full of fire—a racehorse. You will remember him well, it being such a very short time ago since he was running here. He was foaled in 1914, and he did not appear on a racecourse until August 1916, when he made his debut at Newbury, in the Maiden Plate won by Greenroom. Magpie figured at six to one in the betting, but was not in the first six in the race. His next appearance was luckier. He won the Rous Memorial Stakes at the Newmarket First October Meeting from eight others, and the stake was worth £787, and was run over five furlongs. Bullock rode him. A week afterwards he was fourth for the Middle Park Plate, and then, with nine stone up, he was a good third for the Free Handicap. A pretty good performance. In

1917 he only started twice, running third in a Three-year-old Handicap at Newmarket in April, and was afterwards beaten a head, by Gay Crusader, on hard going, in the 2000 Guineas. That closed his career in the Old Country, and he then crossed the submarine infested seas to reach his new home with us in Australia. On 4th May, 1918, he beat Wedge, Whitefield and twelve more of them in the Elder Stakes in Adelaide, weight for age. This was promising. Then in the spring of that year, at Caulfield, in the Stakes (9 furlongs), he again beat Wedge, and this time Ethiopian, also Prince Bardolph, and Dunwil. My remarks on the race were, "easily, always seemed to be going comfortably." But at Flemington later on he really did put up a performance worth remembering. In the Melbourne Stakes, 10 furlongs, he defeated Desert Rose, Wolaroi, Cetigne, Dick Meagher, Estland, Panacre, Ethiopian, and Prince Viridis. Time, 2.4½. My diary says, "in magnificent style. Is evidently a great horse up to 1½ miles." It was the zenith of his form. That was on the Saturday. On the Thursday Wolaroi got home by a head from him at a mile. Wolaroi was a clipper on his day, I may say, and Outlook, Cetigne, and Panacre were behind the pair. On the Saturday Kennaquhair beat him a neck at a mile and a-half, Wolaroi a head away. Kennaquhair had commenced to eat his rivals up in the last hundred yards. He ran no more until the autumn, and at Caulfield, at 9 furlongs, Mistico gave him a handsome beating. I did not think Magpie was himself that day. He was nasty to his attendant, and was uncomfortable, and out of temper. His racing ended in the Haig Stakes at Williamstown, where Mistico took a long lead, and condition failed Magpie in the last furlong, up to which he had made a gallant effort. Mr. Percy Miller will give him every chance where he now is, and we ought to see some tremendously fast horses springing from him. I think you ought to give him mares with any quantity of strong, masculine blood in them. St. Simon, Galopin, Musket, Sterling, Marco, and so on. When well, I have little doubt he was the best of his day, in this country, up to a mile, and I shall be very disappointed if he does not make a name for himself. Give him speedy mares. Don't try to persuade yourself that his own great brilliancy will counteract the lack of pace in plodding mares. Nature don't work that way.

MAGPIE, Bk., 1914 (1).	Dark Ronald (9)	Bay Ronald (3)	Hampton (10)	Lord Clifden (2)	Newminster (8) The Slave
				Lady Langden	Kettledrum (3) Haricot
		Black Duchess	Galliard (13)	Galopin (3) Mavis	
				Black Corrie	Sterling (12) dam by Wild Day- rell
	Darkie	Thurio (2)	Tibthorpe (16) or Cremorne (3)	Parnesan (7) Rigolboche	
				Verona	Orlando (13) Iodine
		Insignia	Blair Athol (10)	Stockwell (3) Blink Bonny	
				Decoration	Knight of the Gar- Toison d'Or
	Poinlay	St. Frusquin (22)	Galopin (3)	Velette (19) Flying Duchess	
				St. Angela	King Tom (3) Adeline
	Chelendry	Isabel	Plebeian (11)	Joskin (14) Queen Elizabeth	
				Parma	Parnesan (7) Archeress
		Goldfinch (4)	Ormonde (16)	Bend Or (1) Lilly Agnes	
				Thistle	Scottish Chief (12) The Flower Safety
	Illuminata	Rosierucian (5)	Beadsman (13) Madame Eglantine		
				Paraffin	Blair Athol (10) Paradigm

Owner, Mr. Percy Miller, Kiora, Scone, N.S.W.

Agriculture.

Sunflowers for Summer Fodder and Silage.

Although sunflowers are gradually coming into favour as a summer crop, it will be granted that they are not grown nearly as much as might be with advantage. It has been proved, particularly in America, that they will produce highly profitable crops on lands which are too dry to grow anything else but a few miserable weeds. Further, that this result can be obtained with no more, or perhaps less, labour and cost than is required to grow a crop of maize on a rich river flat. Grown on similar soil, and under identical conditions, sunflowers usually yield more than twice the weight of feed per acre to maize, which considerably more than counterbalances any difference there may be in the actual feeding value.

The crop may be fed either green or in the form of ensilage, although it is probably as the latter that it gives the best results. Usually farm stock do not take to it readily in a green state, but once they acquire the taste will eat it readily enough. For horses and cattle it is not necessary to cut, but the growth being tall it must be mown for sheep. Many find it best to chaff for sheep feed. A fair crop will easily carry sheep at the rate of six per acre per year, which is equal to 72 head for one month.

In common with all other summer-growing crops, the more thoroughly the soil is prepared the better will be the returns. When preparing the land conservation of moisture should be the first consideration. Plough not later than mid-September, and cultivate after every shower of rain if possible. If no rain falls between ploughing and seeding the land must be rolled in front of the drill. The seed should be sown as early in the spring as convenient, and not later than the end of November. Under normal conditions the earlier the sowing the better.

It has been found in both Australia and America that the most satisfactory results are obtained by sowing in rows about 30 in. apart. This can easily be done with an ordinary seed drill by removing three out of every four stars from the manure box, and replacing them with small bolts or large headed rivets. The seed is then mixed with the manure (say, bone dust at the rate of $\frac{1}{2}$ cwt. to the acre) or some other material, and the mixture sown through the manure box, after having set the drill to sow 2 cwt. manure to the acre. Opinions differ as to the quantity of seed that should be used. Mr. W. J. Spafford, of the South Australian Department of Agriculture, recommends 5 lbs. to the acre. In the United States 8 to 12 lbs. of seed is often used on dry land, and as much as 12 or 15 lbs. where irrigated. In America, though, where heavy sowings are practised, the crop is generally thinned out to spaces of about 12 in. after making a little growth. This would not be necessary with the lighter sowing.

A number of varieties of sunflower are suitable for fodder purposes. Probably the best is the Mammoth or Giant Russian. Black Beauty and White Beauty are also both good.

Cultivation between the rows during the early growing period undoubtedly pays. The first and deepest should be given so soon as the plants are high enough that they will not be covered in the process. Subsequent cultivations may be more shallow. The plants grow quickly, and it will generally be found that two or three stirrings are as many as can be given.

In harvesting numerous methods have been adopted. If the crop has to be handled to any extent satisfactory results are obtained by cutting with a maize binder. The best time to harvest is when about one-third of the apex flowers have just opened, but if the crop is grown for green feed a greater weight can be obtained by cutting just as the first buds appear, cultivating between the rows, and leaving the plants to grow a second crop.

For ensilage sunflowers need to be finely chaffed, and it is therefore necessary to have ample power. If the crop seems dry after cutting, and does not pack well, moisten down with a hose. Usually, though, it packs better than maize, and gives a greater tonnage to the cubic yard. Also it spoils less quickly than maize silage. Tests of the comparative value, in terms of milk production, of sunflower and maize silage have recently been completed at the West Virginia Experiment Station, which certainly point to the economic superiority of the former. True the actual yields of milk were less in the case of cows fed on the sunflower silage, but as a set-off against that the cost of producing the maize silage was much greater. The weights of the animals remained practically the same on both feeds.

Australian Grain Crops.

The Season.

The past month has been unseasonably dry and warm over practically the whole wheat belt. There have been scattered rains in parts, but, taking the country as a whole, the precipitation has been a long way below the average, and insufficient for immediate requirements. The northern districts, which received good falls early in April, are able to carry on, although a downpour would be very welcome. In the south, particularly in Victoria and South Australia, conditions are dry, so dry that in many places all farming operations are at a standstill. The Western and Gippsland districts of Victoria recorded light to moderate rains during the first week in May, but nothing like enough to properly soak the soil. Given a real break in the weather early this month all will be well, otherwise the outlook for the winter is not hopeful. Recent heavy rains in Western Australia have greatly improved the position there.

A commencement has been made with sowing wheat in the earlier districts. The bulk of the oats and other crops are already in, but many are waiting for the necessary rains before sowing the main crop. Sales of fertilisers indicate that farmers intend to increase their areas under grain this year. No doubt the satisfactory returns obtained for wheat, combined with the recent slump in mutton and wool, are influencing a large number in the direction of increasing the area under cultivation. Competent observers talk of increases of from 10 to 15 per cent. in the older wheat districts of New South Wales, while in the newer parts it may run to 25 per cent. Quite possibly the increase in the other States will average up to 15 per cent., if the season develops favourably.

Further official estimates of the last wheat yield for New South Wales and Victoria have been made available during the past few weeks. The New South Wales Government Statistician puts the aggregate yield for his State down at 53,715,840 bushels, which, seeing that just over 50,000,000 bushels have already been delivered into the pool, seems to be well within the mark. The total area sown was 3,656,720 acres, compared with 3,068,540 in 1919. The area cut for hay was 524,680 acres, yielding 827,299 tons, while the grain area was 3,124,370 acres, giving an average of 17.2 bushels. This is the highest average since 1903-4. The best yields were obtained on the north-western slopes, where the average was 21.2 bushels per acre.

The Victorian yield is estimated by the Government Statist at 39,468,625 bushels, a rather low figure, considering that more than 38,000,000 bushels have been taken into the pool to date. Usually one and a-half to two million bushels are kept on the farms for seeding purposes, and it is more than likely that there is still a fair quantity to be delivered at the storage depots. However, the figures are probably near enough for ordinary trade purposes. The total area sown with wheat last year was 2,461,367 acres, of which 2,295,865 were reserved for grain, and 165,502 cut for hay. The average yield per acre of grain was 17.19 bushels. The aggregate area under wheat in 1919 was 2,335,490 acres.

The following table, compiled from the latest official estimates, will enable the reader to obtain a fair idea as to the

total wheat production of the Commonwealth for the last two seasons:—

	1919-20.		1920-21.	
	Acres.	Yield.	Acres.	Yield.
New South Wales ..	1,474,174	4,388,000	3,124,370	53,715,840
Victoria ..	1,918,209	14,858,380	2,295,865	39,468,625
South Australia ..	1,926,915	14,980,413	2,168,412	34,532,540
Western Australia ..	1,041,827	11,222,950	1,242,594	12,777,431
Queensland ..	46,478	311,638	175,750	4,500,000
Tasmania ..	11,497	213,589	20,000	400,000
	6,419,160	45,974,970	9,026,991	144,794,436

The 1920-21 figures are subject to revision, but it is not likely that any great alteration will be made. On two occasions only has the yield of 144,000,000 bushels been exceeded. These were in 1915-16, when the production totalled 179,000,000 bushels, and the following year (1916-17), when 152,000,000 were garnered.

The high averages of 17.2 bushels of wheat per acre recorded for the whole of New South Wales and 17.19 for Victoria cannot be attributed entirely to exceptionally favourable seasonal conditions. As a matter of fact, storms at harvest time in New South Wales and the ravages of "take all" in parts of Victoria materially affected the yields; and yet the averages were the best for many years. Beyond doubt an important factor in this happy result is the growing practice of applying larger quantities of superphosphates to the land when sowing. Figures prepared by the Victorian Statist indicate that, so far as that State is concerned, the increase is equal to an average of 10 lbs. per acre in the last two years. As, however, it is well known that many are content to go on in the old jog-trot way, it is safe to say that the more progressive men have increased the applications of artificial manures on their farms by 20 or even 30 lbs. per acre over what was previously used.

An official return of the last Victorian oat harvest gives the yield as 10,907,191 bushels off 443,636 acres, the average being 24.59 bushels. The figures for the preceding season were 6,603,067 bushels from 559,547 acres, averaging 11.80 bushels.

The Pools.

Prior to his departure for Great Britain the Prime Minister made an important statement regarding the wheat position. He said that information supplied by the Australian Wheat Board shows that overseas operations in connection with the 1920-21 season account for 55,425,000 bushels having been sold. The total f.o.b. value, including payments by millers, is £25,715,000, equal to 9s. 3.3d. a bushel. The freight on c.i.f. shipments averages 3s. 1d. a bushel, insurance .55d., commission .45d., and exchange .34d. In addition to these sales, arrangements have been made for the sale, at market price about time of arrival, of certain quantities, some of which have already been shipped, amounting to about 7,900,000 bushels. Mr. Hughes then quoted the following table showing the c.i.f. and f.o.b. shipments made during each year from 1916 to 1920 inclusively:—

Year.	C.I.F. Tons.	F.O.B. Tons.	Total.	*F.O.B. Return. Per Bushel.
1916 ..	1,233,044	90,773	1,323,817	5/4.6
1917 ..	338,276	1,103,845	1,442,121	4/6.5
1918 ..	121,703	705,176	826,879	5/0.7
1919 ..	135,869	2,087,346	2,223,215	5/9.8
1920 ..	191,657	1,131,699	1,323,356	7/6.1
Totals ..	2,020,549	5,118,839	7,139,388	5/8.6

* Approximate net.

He added that he quoted the figures to show that the people have not paid more than the export parity for wheat. As a matter of fact, they have paid considerably less in the average.

The Prime Minister also touched on the question of including the 1921-22 harvest in the pooling scheme. He said the Commonwealth Government is of the opinion that the world's position is now sufficiently normal to warrant a return to pre-war methods of marketing. It thinks that there should be no pool. At any rate, it will take no step itself to form a pool. But it will do this:—If the States reenact the legislation that is now in operation with regard to wheat, and invite the Commonwealth to join (it being ascertained what part the Commonwealth is desired to take,

and that its co-operation is desired), the Commonwealth will co-operate under the following conditions:—(1) That sufficient wheat is reserved for the purposes of Australian consumption; (2) That the price for wheat for the Australian consumer shall be the equivalent of London parity, as declared from month to month; (3) That the amount advanced by the Commonwealth to the grower shall be not more than 50 per cent. of the value as ascertained by the Wheat Board on the day that the wheat is delivered at the siding.

The opinion that free marketing conditions should be restored at the earliest possible moment is also shared by Mr. Barwell, Premier of South Australia. When passing through Melbourne a fortnight ago he told a reporter that the policy of the South Australian Ministry was that pre-war trading be reverted to, as it did not believe in interference in private enterprise or business generally. He added that the Government would not agree to any pool, unless it could be shown that it was necessary for the producers and consumers.

It is interesting to note in this connection that resolutions continue to be passed at meetings of producers in favour of the pooling scheme being carried into next year. For instance, the following motion was agreed to at the annual convention of the Victorian Chamber of Agriculture held the middle of April:—

"That the executive be instructed to convene a conference of all farmers' organisations and societies of the State in order to devise a scheme to create a grain-growers' association to continue the best features of the wheat-pooling system."

It was fully recognised when the motion was put that any pool to be a success must be compulsory, the main alteration suggested being the elimination of some of the political element from the control. Resolutions of a somewhat similar character have been passed in other States, particularly New South Wales. On the other hand, there seems to be a feeling against pools in South Australia, but it is difficult to say how growers will vote when a ballot comes to be taken on the question. Assumably a ballot is to be taken. Mr. Hughes has promised there shall be one, but nobody seems to be getting the matter in train.

The agitation worked up in certain quarters for a reduction in the price of wheat utilised for local consumption has not been successful. The matter was thrashed out at the April meeting of the board, when the following motion was agreed to:—

"That a contract having been entered into between the board and States for sales of wheat at 9s. a bushel for consumption in Australia until 31st December, 1921, this board is not prepared to vary that contract."

The chairman, Senator Russell, explains that in arriving at this decision, the board was unable to overlook the facts that in 1920 the consumer was provided throughout the year with wheat at a price well below the overseas value, and that at the time 9s. was fixed for this year it was reasonably close to the world's parity. There was no suggestion then of a revision of the contract, and the board considers it unreasonable that growers should now be asked to review the contract, because the turn of the market has been downward.

Senator Russell also mentioned after the meeting that a statement of the profit earned by the British Wheat Commission on the diverted cargoes shipped under the 3,000,000 tons contract has been received. Only minor points remain to be settled, and the allotment of certain storage charges. As soon as final returns are supplied by the States the Board will be able to determine the overseas seasons of the old pools with accuracy, and the final dividends can then be declared. He added that practically none of the 1916-17 wheat was now held in any State. The difficulty in disposing of this had been a factor in delaying the winding up of the pools. It is hoped to clear them up in about two months.

The latest statistics supplied by the Australian Wheat Board, compiled up to 2nd May, show that 129,859,000 bushels have been received into the 1920-21 pool. This is made up as follows:—New South Wales, 50,222,000 bushels; Victoria, 38,068,000 bushels; South Australia, 31,120,000 bushels; Western Australia, 10,449,000 bushels. Wheat shipped overseas on the date mentioned totalled 45,390,000 bushels, and as this item only stood at 28,190,000 on 28th March, it is evident that over 17,000,000 bushels have been cleared during the five weeks intervening. Local sales at the

beginning of May accounted for 9,575,000 bushels, leaving 71,894,000 in the hands of shippers and millers. The bank overdraft on account of all the pools stands at £6,166,000.

The committee appointed a year or more ago by the New South Wales Ministry to assess the losses in connection with the stacking and storing of wheat in the 1916-17 pool has presented a report to the Cabinet. It recommends that the pool account be reimbursed by the Government to the extent of £549,214, as compensation to growers for faulty administration. Apparently the net loss of wheat in connection with the 1916-17 harvest was 2,149,479 bushels. This loss, the committee says, was in part due to the failure of those in authority to admit the existence of the mouse plague until it had been raging for many months.

Mr. Dunn, New South Wales Minister for Agriculture, announces that the State guarantee of 2s. 6d. per bushel will be paid in cash some time in June. This will be welcome news to farmers, who feared that they would be obliged to accept bonds.

Bulk Handling.

Interesting details relative to the cost of fitting ships for carrying wheat in bulk were given in the course of evidence before the Select Committee which is inquiring into the agricultural industry in New South Wales. It appears that the s.s. "Astyanax" recently loaded at the Glebe Island terminal elevators some 4500 tons of grain in bulk, and 1200 in bags. In complying with the regulations of the Navigation Department the cost of fitting the vessel was no less than £2619, apart from nine days demurrage at the rate of £151 per day. Mr. H. D. Bell, of the shipping firm of Gilchrist, Watt and Sanderson Limited, who gave the evidence, went on to say that he had made a comparison between the cost of the "Astyanax" and a similar vessel which they recently loaded with bags. He found, after making allowance for the time each steamer was in port, as well as the expense incurred in fitting, dunnaging, loading, stevedoring and trimming, that there was a difference of 10s. 4d. per ton in favour of the bagged cargo. This worked out at nearly 33d. per bushel, but it might be set off to some extent by a saving in unloading. On the other hand, if the "Astyanax" went to a port not provided with bulk handling facilities the grain would have to be bagged before unshipping, and the cost correspondingly increased.

B Grade Flour in South Africa.

Apparently the last has not yet been heard of the shipments of B grade flour made to South Africa some little time back. In reply to questions asked in the House of Representatives on 22nd ultimo, the Prime Minister said that he understood that a quantity of flour had been sold which turned out unfit for human consumption. The Government of South Africa had taken the matter up, and this Government must do likewise. He considered it the duty of the Government to see that not merely the reputation of Australia, but its material interests, were safeguarded, by putting the matter right. If that involves compensation, then compensation must be made, and the Commonwealth must see, so far as it has the power, that those who are primarily responsible are made to pay.

According to a press report this promise to pay compensation has been officially cabled to the Union Government. The South African Prime Minister is said to have replied in appreciative terms, stating that claims will be submitted as soon as possible. Whether the Australian Parliament will vote the money to settle them is perhaps another matter. It is well to remember that at the time of the sale South Africa was desperately hard up for flour, and bought the supplies from Australia, knowing them to be made from B grade wheat. Just as they began to arrive stocks of first quality flour from Canada became available at a reasonable price, and naturally the demand switched off to the better article. Assumably the flour was sold on contract, and if it were really unfit for food, a court of law should be able to exact compensation from the offender. There certainly does not seem to be any reason why the exporter should get off free and the general taxpayer be mulcted.

Freights.

The latest advice from London is that the market for shipping freights is flat. Australian wheat charters for May are quoted at 52s. per ton, as against 57s. 9d. a month ago. Fifty-two shillings a ton equals a shade under 1s. 5d. per bushel, and there is a considerable difference between that figure and the 3s. 1d. average paid on c.i.f. shipments at the date of Mr. Hughes' statement the end of April.

Markets.

The overseas markets have been quiet during the month. On 20th April the British wheat authorities made a reduction of 2s.

6d. per quarter on Australian grain. The c.i.f. price now for f.a.q. stands at 76s. per 480 lbs., A grade is 71s., and B grade 65s. Sales have been made ex store at 81s. 6d. The latest advice is that the market is a shade firmer.

A Chicago message dated 15th April reports wheat in the United States as having reached the lowest level since July 1916. July deliveries were selling at 4s. 1d. a bushel at Kansas City. Other private advices state that millers in the States were obtaining wheat at 4s. 6d. per bushel. At this price the Americans should be able to secure a large share in the foreign trade in flour.

In its efforts to meet the market the Australian Wheat Board has reduced the price of wheat supplied to millers for gristing into flour for shipment to South Africa, the East, Pacific Islands, and New Zealand to 7s. per bushel. It is understood that some orders have been obtained from Africa on this basis. Local consumption rate remains at 9s. per bushel f.a.q.

Fodder.

Apart from a drop in maize values in Sydney, due to increased supplies, there has been little alteration in the fodder market since last writing. Following are current wholesale quotations for fair average lines in Melbourne, compared with those ruling a year ago:—

	May 9, 1920.	May 8, 1921.
Bran (2000 lbs.) ..	£8 10/-	£11 to £11 10/-
Pollard (2000 lbs.) ..	£8 10/-	£11 to £11 10/-
Oats, feed (40 lbs.) ..	5/2 to 5/9	2/5 to 2/8
Maize (56 lbs.) ..	9/-	5/-
Chaff (ton) ..	£10 to £10 15/-	£4 to £4 15/-

In Sydney bran is quoted at £9 a ton; oats, Algerian feed, 3s. 4d. per bushel; maize, prime dry yellow, Queensland and Northern Rivers 5s. 2d., white, 4s. 10d. to 5s. a bushel; lucerne hay, £3 to £5 a ton.

Adelaide rates for bran and pollard are £10 15s. a ton; oats, Algerian feed, are 2s. 3d. to 2s. 4d. per bushel; chaff, £5 5s. per ton on trucks at Mile End.

Agricultural Notes.

Exports of wheat from Canada during 1920 totalled 123,000,000 bushels, as compared with 68,000,000 bushels in 1919, while flour exports fell from 10,064,373 barrels of 200 lb. in 1919 to 4,730,037 in 1920.

The first official forecast of the 1920-21 Indian wheat crop gives the total area sown as 22,973,000 acres, compared with 30,005,000 acres in 1919-20. Weather conditions at the time of sowing were not favourable.

The Armour Grain Company's huge elevator at Chicago, said to be the largest in the world, was wrecked on 19th March by an explosion due to the ignition of grain dust. Half a million bushels of grain were destroyed and some lives lost.

A recent report, published in Moscow, gives the Russian yield of wheat for 1920 as 104,000,000 bushels. If correct this is very much below the normal, and a famine is feared unless a large quantity of seed grain can be obtained before next sowing.

Mail advice from New York dated early in March states that the sowing of spring wheat in the United States had begun over a wide area under favourable conditions. Winter wheat was looking well at the time. A later cable reports damage to crops in Kansas through bad weather.

Argentine Grain Exports.

(TO BRAZIL INCLUDED.)

	Total 1919.	Total 1920.	1921. 1st Jan. to 3rd March.
Wheat	3,268,950	5,039,958	975,741
Maize	2,374,721	4,387,736	359,414
Linseed	840,978	1,014,340	166,726
Oats	331,350	410,587	74,344

ACRES SOWN.

	1919-20.	1920-21.
Wheat	15,133,600	15,190,250
Linseed	3,563,000	3,594,685
Oats	2,397,500	2,087,500

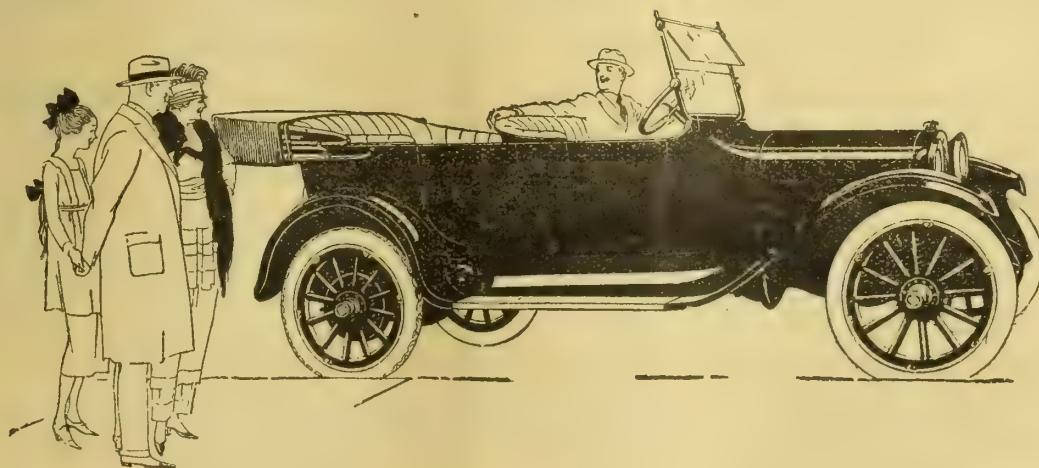


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The Wool Trade.

The Wool Trade in Australia and New Zealand.

The month has been a history-making epoch in the wool trade, but one which it is felt will not yield much kudos to those individuals who have devoted their time to the unravelling of a knotty problem, albeit their efforts are deserving of all praise.

Following on the conference held on the 17th March, a small body of experts has been sitting practically continuously trying to evoke a basis of values which would be acceptable as a minimum reserve. This had to be based, as far as possible, on the cost of production, a most difficult item to put into concrete form, and a question that has not yet been properly grappled with, although figures have been quoted as going to show such as 10d. per lb. How this figure is arrived at is not definitely known, but it was used in addressing a body of legislators, and in the absence of any direct contradiction may be accepted as fairly representing the position.

The experts eventually drew up a table, the general average of which, expressed in one figure, may be set out at 9d. or within a decimal point or two of such. In this they were greatly helped by the bareme, or table of limits that figured so conspicuously in the appraisal scheme, and has become quite a standard of reference.

With this to work on, the duties of the experts were considerably reduced, and by a practically continuous session the whole of the 848 types therein were revalued.

It must not be gathered from this that the proposed basis of reserves is simply a reduced all round series of clean cost-ages of the various types, for this would have placed the relative values of Merino and crossbred out of the correct perspective. The relative position of crossbred types to Merino, as disclosed at the March sales, has been preserved, resulting in a table which reflects as far as possible the values then prevailing. And although the figure of 9d. has been indicated, it must not be overlooked that if all the wool on hand of the 1921 clip were to be sold at the actual reserves set down, that figure might not be reached, as a large proportion of the best wools has already been disposed of. However, that, of course, was not intended, the idea being to frame a basis of values, below which wool should not be sold, with no limit on what the trade might be prepared to pay over and above such reserves for those lots which came within the scope of the limited demand that exists.

Growers can still place a reserve on their wools over and above the minimum price, but they would be well justified in allowing their respective brokers to do the best they can for them, once their clip is submitted to auction.

Government Help.

Before the Prime Minister left for England, a deputation waited on him, pointing out the assistance required to bring woolgrowers within the scope of the scheme. He could not resist the opportunity of reminding the members of such deputation that he had made proposals some time since, which had not been entertained. He is nothing if not apt at finding some scriptural allusion, and referred to himself as the stone which was rejected by the builders, and had now become the head of the corner. However, he promised assistance, and made a long statement in the House as to the position, without, however, pledging his Government to anything definite. The matter was debated in the House at some length, and the Acting Prime Minister announced he was prepared to accept a minimum basis of reserves of 8d., and to take advantage of the Customs Act to provide the necessary legislation.

At least it cannot be said that the woolgrowers are trying to exploit the public at this level, but unfortunately, for reasons stated later, the consumer will reap little, if any, benefit from the further reduction.

The position has now been reached that the following resolutions have been adopted in both Houses:—

"1. That this House approves of the issue of a proclamation under the Customs Act 1901-1920 prohibiting, for a period not exceeding six months, the exportation of wool from the Commonwealth, unless—

"(a) In the case of wool purchased within the Commonwealth, a price, not lower than the price agreed upon as the official reserve in respect of wool of that type, is paid by the purchaser, either at auction or by private treaty; and

"(b) In the case of wool consigned for sale overseas, security is given, to the satisfaction of the Minister for Trade and Customs, that the wool will not be sold, either publicly or privately, at a price lower than the equivalent of the price agreed upon as the official reserve in respect of wool of that type, plus the freight and other charges on the wool from the port of shipment in Australia to the place of sale overseas.

"Provided that the price agreed upon as the official reserve in respect of wool of each type shall be such a price as will produce an average price of 8d. per lb. for an average Australian wool clip, and that such official reserve shall be determined by the British Australian Wool Realisation Association Limited, in accordance with the principles upon which the prices of wool were determined by the Central Wool Committee during the period of sales to the British Government."

Sales will open on the 9th inst., therefore, under the condition that each lot of wool submitted will be valued by no less than three brokers' valuers, who will assess its proportionate value, according to class and condition, to a general all round average of 8d. per lb., as if the whole clip were still for sale, below which the various lots will not be sold.

Conversion Costs.

A point which has not perhaps been sufficiently appreciated is the tremendous increase which has taken place in the various stages from the grower to the manufactured article. The producer may be inclined to solace himself with the thought that at least he is the unwilling means of providing cheap clothing for the man in the street. Unfortunately, both for himself as well as the general public, this is not so, the raw material forming but a comparatively small factor in the position.

Turning to crossbreds, for example, in the season of 1901-2 coarse crossbreds and Lincoln sorts were selling round about 3d. to 4d., which left a profit to the buyer at 8½d. per lb. for the tops made from such, which to-day would have to realise nearer double that to show any profit. The price of the raw wool is stated to be to-day only about one-third of the cost of the tops, and that is not even midway in the total process of manufacturing.

It follows then that any further reduction in the value of raw wool would, under present conditions, make but little difference to the consumer.

The crux of the whole matter is labour, and wages must come down before costs as a whole can be affected. High wages per se are not the ultimate goal to aim at, rather must it be the purchasing power of wages, and until that point is thoroughly appreciated no material improvement in conditions can be looked for.

In the meantime, the grower is producing at a loss, and that can have one result, depression and general unemployment.

American Tariff.

The Emergency Tariff in the United States has not yet definitely become law, although expected to receive the President's signature within the next fortnight, and to hold good for six months. The rates to be imposed are 15 cents (7½d. under normal conditions) on greasy wool, and 30 cents (or 15d.) on scoured. This is certainly a heavy impost, working out in the case of wool realising 20d. in the grease here at some 37½ per cent., but is tempered by the fact that as the rates of exchange favour America, the net impost will not be much more than the duty in force prior to the war.

American competition can be expected on all suitable wools, and it is known that orders are held, so that there is still some corn in Egypt. [Cable advice from New York dated 10th May states that under the new Permanent Tariff Bill, which is now in committee, the tax will be as follows:—Greasy, 5½d. per lb.; washed, 11d.; scoured, 16½d.—Ed.]

Fresh Outlets for Wool.

The question arises with the present low levels for certain wools—Is there no chance of such supplanting some other raw material? In this regard one naturally considers the use of our coarse wools for carpets, but here again conversion costs have to be reckoned with, and there does not appear to be much hope in that direction.

However, a suggestion has recently been made by one who has been long connected with the trade that it might be possible to make a container for wool to take the place of the usual jute pack. Much was heard of the jute fibre trouble prior to the war, and the idea certainly should receive consideration, even if only as a solution of that problem. It is claimed that a container of practically the same size as today's pack of commerce could be made, weighing some 6 lbs., saving freight, and possessing a distinct value in the eyes of the buyer.

It is also asserted that twine could be made out of low grade Lincoln wools; in fact, some has already been experimented with, and apparently offers good opportunities for further exploiting its usefulness. It is suggested that the making of such might be taken up by a body of returned men, but not as a permanent industry, for it is hoped an improvement in values would automatically bring its usefulness to an end.

Anything that helps, however, to diminish the great bulk of carry-over wools should receive the earnest attention of all concerned, from a truly national point of view.

May Sales in Australia.

The itinerary of May sales appears below, and will naturally be followed with great interest by all concerned, as the conditions under which wool will be offered provide quite a new departure in the realisation of Australia's wool clip. That they will be successful has yet to be proved; at least, they deserve a fair trial, but it is felt that the way might have been better paved to fruition if the buying side here had been taken into the confidence of those at the head of the scheme, even to a limited extent, buyer and seller having much in common.

Centre.	Commencing.	Quantity.
Sydney	May 12	12,000 bales
Melbourne and Geelong	May 9 to 19	26,000 "
Brisbane	May 16	25,000 "
Sydney	May 23	27,000 "
Adelaide	May 27	10,000 "

London Sales.

Results of the May sales in London, which opened on 3rd inst., were rather more encouraging, in that the almost monthly continuous decline appears to be arrested—for the time at least. On the first day the offerings were free wool, which met with strong competition, prices advancing all round from 5 to 10 per cent. over April closing rates. Catalogues comprised 9300 bales of a good average selection, but with no super wools available.

The attendance was a good one, the Continental section, including Germany, being specially prominent, but no Americans were operating.

Greasy Merinos were 10 per cent. above April closing rates, scoured 5 per cent. to 10 per cent., and medium and fine crossbreds $7\frac{1}{2}$ per cent. to 10 per cent. higher, lower sorts being par to 5 per cent. dearer.

The bulk of the wool was sold, the great majority of the purchases being on Continental account.

On the second day an average selection of Bawra wool was staged, of which 90 per cent. was sold, private cables quoting the market as firm, with a hardening tendency, rates compared with opening prices showing good Merino 5 per cent. to 10 per cent. advance, fine crossbred 10 per cent.

Altogether, without being unduly optimistic, it looks as if bottom has been reached, and that confidence is slowly reviving.

May Australian Sales.

Sales were to have opened in Sydney and Melbourne simultaneously on the 9th inst., but owing to the regulations

necessary for the carrying out of the scheme not being available at the time of commencement in the former centre, they were postponed till Thursday, the 12th. In Melbourne, after some slight delay to enable a deputation to wait on the chairman of B.A.W.R.A., it was announced that the selling brokers would be in a position to enable the buyers to ship, and the sales proceeded.

It was soon apparent that a material change for the better had come over the market since the closing sales in March.

Competition was both keen and vigorous from the jump, the Continental section being specially insistent, with the result that 90 per cent. of the offerings was sold under the hammer.

Catalogues were mainly composed of northern wools, with some 60 per cent. of Merino, appealing largely to the French and Belgian section, who were keen bidders, competition at times being reminiscent of pre-war days. On the following day the offerings were of a broader haired type, but Bradford responded well, and another good clearance was effected. Up to 18 $\frac{1}{2}$ d. was given for an Eastern Riverina clip, a neighbouring wool making 17 $\frac{1}{2}$ d., both branded Annandayle, being, as a matter of fact, the two divisions of that old property near Holbrook.

General satisfaction was expressed as to the result, and it certainly seems as if, without being too optimistic, the bottom has been touched, and the drift stopped. Come what may, the fact remains that it is the first occasion that such a good clearance has been made this season, and even though the prices of crossbreds are low, these wools are at least saleable.

American competition was conspicuous by its absence, although it was generally thought that some few orders were held. However, the representatives of that country will probably be heard of before long.

Control of Export.

The following regulations are contained in a proclamation issued by the Deputy Governor-General (Lord Stradbroke) under the authority of section 112 of the Customs Act, by which the export of any goods which may be considered harmful may be prohibited.

The regulations provide that the reserve price to be notified by Bawra to the Minister as being the reserve on each type shall be determined by Bawra in accordance with the principles on which reserves on wool were determined by the Central Wool Committee in respect of wool of the season 1919-20. This shall be a reserve as will, with the reserve similarly determined in respect of all other types of Australian wool, produce an average reserve of 8d. a pound for an average Australian wool clip. For the purposes of the regulation the average of the Australian wool clip for the seasons 1917-18, 1918-19, and 1919-20 shall be deemed to be an average Australian wool clip.

Every person desiring to export wool from the Commonwealth during the continuance of the proclamation will be required, prior to the shipment of the wool, to supply to the Collector of Customs:—

(a) In the case of wool purchased in Australia on or after the date of the proclamation (not being wool on consignment for sale overseas), a statutory declaration or other evidence to the satisfaction of the collector that the wool was purchased by the person on whose behalf it is being exported at a price not lower than the reserve agreed upon as the official price for wool of that type; and

(b) In the case of wool consigned for sale overseas an undertaking or security, to the satisfaction of the Minister, that the wool will not be sold at a price lower than an amount which represents the equivalent of the reserve agreed upon as the official reserve for wool of that type, plus the freight and other charges on the wool from the port of shipment in Australia to the place of sale overseas.

If any wool in respect of which such an undertaking is given is sold at a price lower than the amount provided for in the undertaking, the person who gave that undertaking will be guilty of an offence. Penalties of £50 are provided for breaches of the regulations.

The regulations are to remain in force for a period of six months from 9th May.

New Zealand Wool Sales Suspended.

Mr. A. E. Mabin, of Messrs. Levin and Co., Wellington, has been in Melbourne representing New Zealand in connection with the British-Australian Wool Realisation Association. In the meantime, all wool sales scheduled to be held in the Dominion have been cancelled. The prohibition of private sales of wool as proposed at the recent conference of producers is still under consideration, but the brokers have definitely suspended all auction sales.

[A New Zealand cable, dated 11th inst., says that at a meeting of the Producers' Standing Committee in Wellington to consider Mr. Mabin's report, a long discussion took place, and finally the following resolution was passed:—

"That, after full consideration of the proposals submitted by Bawra through Mr. Mabin, this committee is of the opinion that the interests of the New Zealand producers demand the retention of a self-reliant scheme, by which, while co-operating with the association as regards the fixing of minimum reserves and the limitation of offerings, full control of all matters concerning the handling of the clip will be retained in New Zealand."

The committee also agreed that wool brokers be authorised to arrange for the resumption of wool sales in New Zealand as soon as convenient.—[Ed.].

WOOL ARRIVALS AT SEABOARD IN AUSTRALIA.

From 1st July, 1920, to latest dates.

State.	Date.	Bales.	Bales.
New South Wales ...	April 28, 1921	—	551,500
Victoria ...	April 29, 1921	—	286,167
Queensland ...	March 26, 1921	—	—
Townsville ...	—	65,322	—
Rockhampton ...	—	37,431	—
Brisbane ...	—	140,447	—
			243,200
South Australia ...	April 30, 1921	—	—
Port Adelaide ...	—	113,585	—
Other ports ...	—	20,515	—
			134,100
West Australia ...	April 16, 1921	—	—
Fremantle and Albany ...	—	40,667	—
Geraldton ...	—	18,450	—
			59,117
			1,274,084

AUSTRALIAN WOOL EXPORTS.

From 1st July, 1920, to 30th April, 1921.

Compared with corresponding period last year.

	Ten Months.			
	Season 1919-20.	1919-20.	1920-21.	
	Bales.	Bales.	Bales.	Increase. Decrease.
New South Wales	703,456	534,400	365,619	— 168,781
Victoria	533,604	407,539	289,117	— 118,422
Queensland	353,964	308,500	224,622	— 83,878
South Australia	195,865	143,215	109,204	— 34,011
West Australia	160,550	140,892	67,794	— 73,098
Tasmania	30,247	24,248	4,705	— 19,543
	1,977,686	1,558,794	1,061,061	— 497,733
	Net Decrease, 497,733 bales.			

Considerable quantities of wool grown in some States are shipped from others, therefore the above figures do not show actual production of each State, but the total overseas shipments.

New Zealand Exports from 1st July, 1920, to 31st March, 1921, 342,550 bales. Figures for the same period 1919-20 were 389,087 bales.

South African Wool Freights.

As a result of South African negotiations with the Union Castle Company, in connection with wool freights, the following reductions have been arranged:—The rates on grease wool have been reduced from 1 7-16d. to 1½d., and scoureds from 2 5-16d. to 1½d.

Winchcombe, Carson's Annual Wool Review.

We have received a copy of this excellent trade review, the thirty-second issued by Winchcombe, Carson Ltd. After giving a clear summary of the trade and the pastoral industry, with its extraordinary ups and downs, for the past twelve months, the present position of wool is fully discussed. Dealing with the question of cost of production, it is said:—

"Shearing now costs in the vicinity of 1s. 1d. per head. That charge certainly includes classing and baling, but not the cost of packs. With a sheep producing, say, 7 lbs. of wool, which sells, for the sake of example, at 10d. per lb. all round, shearing takes more than a moderate toll of the year's earnings. And it has to be remembered that at the present time tender, or short, burry wools, in many cases do not average even 6d. a lb. all round.

"The position of coarse crossbred, if burry, is even worse. With the high cost of shearing, wages and land taxation, the values now realisable for this grade are below the cost of production so far as the wool is concerned. The grower thus has only the meat to look to for his source of profit. Some few years ago shearing costs were under 6d. per head."

Referring to the New South Wales clip for the past year, the review says:—"Riverina, Yass, Monaro, and the central western tablelands were the only districts able to produce clips in any way equal to usual standard. As anticipated, the clips from the north-west, far west and western plain country lacked growth . . . generally were tender, thin and dusty. Under the severe conditions which ruled in these districts it was impossible to grow attractive wool. Northern wools were not up to standard . . . and the Hunter Valley had a bad time, the wools grown indicating the lean year." In regard to the Queensland clip it is stated:—"With few exceptions it proved disappointing, but with the favourable conditions experienced throughout the summer, and the almost assured good times for the winter, the next season's clip should easily eclipse its predecessor in growth and soundness."

Dealing with the outlook, the review says:—"There is little likelihood of prices for burry Merino wools, short faulty Merinos, and medium to coarse crossbreds showing any rise—rather the reverse. The great need is to get them moving off in big volume. Possibly to effect clearances owners will find it necessary to accept prices far below their expectations. The heavy stocks of wool on hand are not likely to improve in value by keeping. More wool is piling up on the sheep's backs. Indefinite holding will only postpone the evil day and build up troubles for the future. It would appear wise, therefore, to grasp the first opportunity which offers to quit these wools at anything like reasonable rates. Once wool supplies are reduced to somewhere near their normal pre-war quantities, each year's clip should commence to sell with the rapidity to which growers were accustomed prior to 1914."

Canadian Wool Market.

The Sheep and Goat Division of the Canadian Department of Agriculture reports under date 10th March:—

"There is little change in the wool market situation, prices on eastern wools running from 14d. for medium down to 8d. for coarse, and western wools quoted 1½d. to 2d. below these prices. Considerable quantities of held wools have already been consigned for grading and co-operative sale, so that lots of graded wool will be offered for sale during the spring months."

QUIBELL'S Improved Powder Sheep Dip

GIVES THE BEST RESULTS.

Our English Wool Letter.

(Specially written for "The Pastoral Review.")

LONDON, 24th March, 1921.

Topmakers' Boom and Slump.

Since last writing another series of London sales has come and gone, and although readers of The Review will have been apprised by cable of the results, a brief outline of what took place will well repay everyone. Although well on the top side of 80,000 bales were catalogued, little more than 76 per cent. was actually sold, and the quantity disposed of left the balance of prices on the wrong side when viewed from the standpoint of the grower. The sales opened with everything 10 to 15 per cent. down compared with the January auctions, and that decline deepened until at the finish practically everything was 20 to 25 per cent. cheaper. Had there not been some encouraging buying on American account, the 8000 bales which were taken for that quarter would also have fared adversely, but, as a matter of fact, what was taken for the United States mostly declined 10 per cent. In pre-war days the declines which are taking place almost weekly in Australia and London would be regarded as a veritable slump, but the entire trade has become so accustomed to falls that such declines give rise to little comment. One regrets that this is so, for it shows how callous the trade is to what is actually happening. But this is all a serious omen to readers of "The Pastoral Review," and at heart even wool buyers feel that prices for wool have now declined so seriously that any further fall will be of no advantage to the consuming end of the trade. For once in a while we hear frequently the remark that wool has fallen enough, and that the sooner we get stabilised values and a return of confidence the better it will be for the whole trade in general. That seems a very sane view, and yet the trade is faced with conditions which show no improvement whatever, which fact continues to be the bugbear in the life of the wool textile industry. If it be true that the darkest hour is always before the dawn, then that hour has surely arrived.

Inability of the B.A.W.R.A. to Stop the Rot.

It affords the writer no pleasure whatever to say that notwithstanding that Sir Arthur Goldfinch told the trade in January that the rot must stop, and that "the fall in prices must be arrested, not by improvement in demand, but by concerted resistance on the part of sellers," values have fallen a further 20 to 25 per cent. Notwithstanding that every good wish is held out to the B.A.W.R.A., this important association can no more stop the downward tendency of values that could King Canute stop the incoming of the tide. Last week we had cable information from Melbourne that Sir John Higgins had called the members of the Australian trade together for a conference, and from what was said it is plain to be seen that the crisis is as acute in Australia as on this side. It is very regrettable that this is so, but what can be done to bring about a change for the better? The chief topic of conversation in London last series was the competition between new wools and those under the control of the B.A.W.R.A., and it appeared that so long as growers were prepared to meet the markets, the B.A.W.R.A. must do likewise; in fact, it seemed to be a competition between the two sections as to which was prepared to take the lowest prices in order to get rid of the wool. In face of such big stocks we think that growers did wisely to sell, and will continue to act wisely in meeting the market, particularly in regard to Merinos. Although values have fallen and are low for good wools, the prices ruling are still a paying proposition, it being in the coarser grades where growers must be losing heavily. No living man has power to evolve conditions which will promote a better state of affairs, and it seems to many that until the eastern part of Europe settles down to sound commonsense methods of life, and the reparation difficulty with Germany is out of the way, so long will adverse factors obtain in the wool textile trade of Europe.

How Prices Have Fared.

We epitomise the course of the last London sales by showing the changes seen compared with the close of the January auctions:—

Greasy Merino, superior	2d. per lb. lower
" " average to good	3½d. "
" " poor condition	2d. to 2½d. "
" " inferior locks and pieces	1d. "
Scoured " superior	3d. to 4d. "
" " average to good	4d. to 6d. "
" " inferior	6d. "
" " faulty locks and pieces	3d. "
Greasy Merino, lambs, superior	1d. "
" " " medium	2d. "
" " " inferior	2d. "
Greasy crossbred, fine, superior	2d. "
" " " ordinary	3d. "
" " " medium, superior	3d. "
" " " ordinary	2½d. "
" " " coarse, superior	2½d. "
" " " ordinary	2d. "
" " " lambs	1d. "
Scoured " fine	3d. to 4d. "
" " " medium and coarse	3d. "
Slip crossbred, fine lambs	2d. "
" " " medium lambs	3d. "
" " " coarse lambs	2d. "
" " " faulty classes	2d. "
Greasy Punta Arenas, well conditioned	2d. "
" " " wasty	1½d. "
" " Falkland Island	2d. "

South African Wool.

Snow White, super Western	3d. "
" " super	3d. "
" " medium	2d. "
" " inferior	2d. "
Greasy combing, light	2d. to 2½d. "
" " heavy	2d. "
" " clothing, light	2d. "
" " heavy	1½d. "

Topmaking Inquiry.

Last week the Board of Trade published a report on the topmaking industry, prepared by the Sub-committee on Wool, Tops and Yarns, appointed by the Standing Committee on the Investigation of Prices under the Profiteering Acts 1919-20. This report is supposed to be the results of a special committee appointed to go into every detail connected with the alleged profiteering of topmakers during 1919, the inquiry being the outcome of strong Labour agitation charging Bradford firms with making colossal profits. The results of the inquiry completely fail to establish the contention of those who are the biggest enemy of the wool textile industry. No man in his senses would ever think of taking one year's working results upon which to give a verdict on any trade, and particularly the one year in a lifetime when most abnormal conditions obtained. The report describes the topmaking industry as "highly speculative," hence the greater importance of taking a series of years and then pronouncing a verdict. It can be truthfully said that all the profits made in 1919 have been more than lost in the colossal slump of 1920, but that is never touched upon.

The Investigation Committee took three typical grades of wool and corresponding qualities of tops for the purpose of illustration, and the following table is given as showing the cost of wool in pence per lb., clean scoured, delivered London, pre-war and during nine months ended December 1919:—

Quality.	July, 1914.	April, 1919.	Dec., 1919.
	d.	d.	d.
40's low quality (prepared)	14½	33½	29½
56's crossbred	24	58½	86½
70's (fine Merinos)	30½	80½	150½

The above table shows that the lowest grade of wool had rather more than doubled in price between July 1914 and April 1919, but that there had been a slight decrease between April 1919 and December 1919. On the other hand, 56's and 70's increased by April 1919 to about two and a-half times the pre-war value; 56's had been increased by December 1919 to three and a-half times, and 70's to nearly five times pre-war figures.

Net Profit in Pence per lb. of Tops.

We now come to deal with the net profit made by top-makers. The figures given in the chief accountant's report show that, taking the five firms of which data are available, the average profit per lb. of tops for the year 1912 amounted to .427d., the figures ranging from .129d. to .568d. This had increased in the year ending December 31, 1919, to an average of 9.37d. before deduction of excess profits duty, and 6.325d. after reduction of excess profits duty. The highest profits per lb. before deduction of excess profits duty were 14.045d., and the lowest 4.439d., while after deduction of excess profits duty the highest profits were 9.919d., and the lowest 2.735d. These figures represent an increase in the average profits per lb. over the five firms of approximately twenty-two times before deduction of excess profits duty, and fifteen times after deduction of excess profits duty, the highest increase being fifty-five times the pre-war profit before deduction of excess profits duty, and thirty-seven times after deduction of excess profits duty, while the lowest increases were eight times before deduction of excess profits duty and five times after deduction of excess profits duty.

The above table shows clearly enough what has always been known, namely, that topmaking is, on the whole, a very lean job, it being the big weights turned over which very largely contribute towards making any profit at all, there being times when, in a falling market, buyers had purchased heavily in the colonies, and they stood to lose considerably. On the other hand, when there was a rise, they did not realise all they should because of having sold forward.

Percentage of Net Profits on Total Turnover.

The report dealing with the above subject says that the average rate of profit on the turnover taken over the five firms was 2.19 per cent. for the year 1912, and 14.76 per cent. for the year 1919, before deduction of excess profits duty, and 9.696 per cent. after deduction of excess profits duty. The lowest profit made in 1912 was 0.69 per cent. on the turnover, and the highest profit was 3.24 per cent., while in 1919 the lowest rate of profit was 10.29 per cent. before deduction of excess profits duty, and 6.99 per cent. after deduction of excess profits duty, and the highest rate of profit was 17.79 per cent. before deducting excess profits duty, and 11.60 per cent. after deducting excess profits duty. The average percentage of profit on capital in 1912 was 15.72 per cent., and in 1919, before deduction of excess profits duty, was 59.44 per cent., and after deduction of excess profits duty, 39.05 per cent. The lowest percentage of profit on capital in 1912 was 6.30 per cent., while the highest percentage of profit was 67.62 per cent. In 1919 the lowest percentage of profit on capital was 42.90 per cent. before deduction of excess profits duty, and 26.47 per cent. after deduction of excess profits duty, while the highest percentage was 131.05 per cent. before deduction of excess profits duty, and 88.83 per cent. after deduction of excess profits duty.

It is the last paragraph which has kicked up the most dust, but notwithstanding the big profits made, the losses have been equally as great, in fact greater, during 1920. The above table must be incomplete without our showing how serious the fall has been in tops compared with March 1920 and those ruling to-day:—

	Mar. 25, 1920.	Mar. 24, 1921.	Decline.
	d.	d.	d.
70's warp tops	174	45	129
64's	162	36	126
60's super	150	33	117
58's average	98	26	72
50's average	74	23	51
48's carded	46	16	30
40's prep.	39	14	25

The Outlook.

The immediate outlook shows very little relief to the conditions obtaining to-day, and we look in vain for any amelioration in the adverse factors which obtain. The home trade gets worse, if that can be, and certainly the export trade in wool, tops, yarns and pieces grows less also, as shown by the last Board of Trade returns. The only bright spot in connection with the trade during the past month has been the purchases by America, due solely to the antici-

pated higher duties for wool and its products. Australian growers of superior Merinos need not be in the least alarmed at the imposition of duties on raw wool. America will still buy these because her manufacturers cannot do without them, and may buy more than ever. Apart from the American trade, conditions obtaining in the mills of Yorkshire are chronic. Many firms of high standing are feeling acutely their financial position; in fact, many firms have called their creditors together privately, and extended credit is being demanded by all. If bankers were to withdraw their support then there would be a financial disaster of the first magnitude, but bankers know this, and are standing magnificently by firms for whom they have the greatest respect. It seems to the writer that there can be no improvement in general trade until high costs of production come down, until there is a settlement in the political and national life of Germany, Russia and the Balkan States, and until everybody is prepared to do their best to rehabilitate trade on more sound and common-sense lines.

Suffolk Wool.

Mr. W. T. Ritch, the well-known wool expert and technical instructor of the American Wool Improvement Association, writing to the Suffolk Sheep Society, England, says:—

"I have examined your samples of Suffolk wool, both ewe and hogget, and I am pleased to report that they are the best types of medium Down wools I have tested during the past ten years, either in Australasia, South Africa, South America, Canada, or the United States.

"From a breeder's standpoint, the length is good, the character is excellent, and the density is wonderful, while the colour, strength, and elasticity leaves nothing to be desired in Down wool. The bulk spinning quality is high 56's, the hogget wool running to almost 58's. After critical inspection and a careful scouring test I found two valuable points in favour of your wool. First, the colour is a pure white, and not a creamy white like most Down wools; second, I did not find the slightest trace of any fibres with an ashen-grey tint, and no stray light brown fibres were found in the fleece beyond the extreme points, the head and legs. I regard this advantage as a triumph in scientific breeding, when the intense black hair of the head and legs is taken into consideration.

"No better crimp could be desired in medium Down wools, and Suffolk sheep carrying fleeces like your latest sample would be highly appreciated in New Zealand and Australia, where wool-growers are somewhat exacting on this particular point. I have no hesitation in saying that for quality, type, and general character the sample of ewe hogget wool grown by Sir Ernest Cassel ought to be a copy-book headline for all breeders of Suffolk sheep."

The Wool Industry.

Assistance for Necessitous Graziers.

At a meeting of representative graziers, held at Coonamble, N.S.W., on the 7th inst., and presided over by Mr. M. J. A. Feehan (Wingadee), the following resolutions were adopted:—

That the Federal Government be urged to come to the assistance of necessitous graziers immediately.

That the State Government be approached with a view to having the balance of the Necessitous Settlers' Relief Fund made available for the relief of necessitous graziers immediately.

That the Federal Government immediately take steps to stabilise the grazing industry.

That the Commonwealth Government be asked to finance the graziers requiring money by advancing against the security of their land and wool on a second mortgage, to enable them to meet outstanding debts other than those owing to the banks and financial institutions on mortgage, and to buy stock; such advance to take the form of notes paid to the bank as security for the credit given to the graziers, the notes to be redeemed within two years.

It was decided to communicate with the Acting Prime Minister asking him when he could receive a deputation, which would place before him the views of the committee. Messrs. G. D. Ritchie (Quambone), Thomas (Walgott) and B. H. Oxlade (Carwell) were appointed as a deputation, to proceed to Melbourne at as early a date as possible to interview the Acting Prime Minister.

United States of America.

SALT LAKE CITY, UTAH, U.S.A., 4th March, 1921.

Were conditions in the market end of the industry more favourable, the live stock men of the United States could well be jubilant, for they have had one of the best winters in many years in the range States. Reports from various sections indicate that mild weather has prevailed, with no disastrous storms or periods of extreme cold. In a few exceptional districts there have been some slight losses, but nothing to compare with the experiences of some winters within recent memory. The range is in good condition, and stock is doing well. There is plenty of feed, and it looks as if there will be moisture sufficient to give assurance of a good summer range as well.

On this latter point, however, there is some ground for reflection, in view of the fact that the past two or three weeks have been so springlike and warm over much of the range that it may develop that the snows of the uplands and in the canyons is melting too fast. The snow banks in the hills must not be disturbed too early by melting sun or winds, for if they are the water is not held back for gradual run-off and seepage during the hot summer months when it is so much needed; but runs to waste in the early spring freshets, leaving most of the summer dusty and dry. In such a case, not only does the summer range suffer, but the woolgrowers experience loss from shrinkage of weight in their animals, and from the disadvantages of sand, dust and dirt in the fleeces taken from the sheep's back.

Of course, it is a little early to begin to jubilate over the completion of winter, for it has been the sad experience of many American live stock men that disastrous storms have come along in March and even later, descending suddenly, and leaving death and destruction over wide areas of the range. Of course, this is exceptional rather than typical, and nothing of the kind is expected this spring, but the growers always find it pays to be ready for an emergency.

It has been a most fortunate thing for the flockmasters of western America that the winter has been mild, and that as a consequence there has not been the necessity of buying as much feed as usual. For, to put the matter briefly, the growers would not have been able, many of them, to buy this feed even had the very lives of their animals depended upon it. Our last two letters to the "Pastoral Review" indicated something of the hardships and discouragements that have come upon the sheep and cattle industry, owing to the collapse of the buying market, and the other phases of depression following the war. Since our January letter, in which improvement was predicted, there has been a slight trend upward in wool, but the meat end of the industry is perhaps even worse than it was; at any rate, prices paid the grower for his live stock are lower than they were two months ago. It is not too much to say that had a severe winter developed, requiring much feeding and other expensive measures of maintenance, many of the growers, especially the small ones without extensive financial reserve, would have gone speedily into ruin and bankruptcy. As it is, many of them can scarcely be said to be solvent, but the banks have been kind, and they are clinging on in the hope of better times.

Wool.

The shearing season is near at hand again over most of the range States; in the southern sections as, for example, Arizona, shearing already is getting under way. The clip is reported good in both quality and quantity. But what shall be done with the wool when it has been taken from the sheep's back? The markets are already crowded with wool from last year and the year before, and millions of pounds are coming in from Australia and other parts of the world. And except in limited quantities the dealers and the manufacturers are not buying. Of course, the sheep must be shorn, for their own sakes, and the wool must be cared for somehow. During the winter this problem has been considered at considerable length, and various methods of meeting the situation have been discussed. Just what will

develop remains to be seen. Flockmasters in several States have met and have planned to form wool pools so as to enjoy the advantages of co-operative effort. It is evident that the wool—or at least the greater part of it—will not be sold outright at shearing time, as it used to be in the "good old days." But even now the hope is entertained that within the month or six weeks to come, when shearing will be getting into full blast, there may be developments that will bring buyers into the field, and thus help the situation.

Unquestionably some of the woolgrowers will take advantage of the Government Warehouse Licensing Act, and will place their wool in one of those warehouses for future distribution. The National Wool Warehouse and Storage Company of Chicago is making an extensive canvass of the field, and not a few flockmasters will store with them. This concern has initiated a system of negotiable warehouse receipts and bills of lading whereby it is promised the sheepmen can have part of the money for their clip as soon as it is loaded on the cars for shipment to the warehouse. Inasmuch as immediate money is the pressing need of the flockmasters, this is to them a vital consideration.

Decreases in Live Stock.

Representatives of both the sheep and cattle industry report a decrease in the number of animals on the western ranges and the middle western farms this spring in comparison with a year ago. In sheep, it is stated, the decrease will be found to be fully 10 per cent., perhaps more; and in cattle fully as much. The reason is simple. The growers not only found it impossible to keep up their flocks and herds as well as they would have done in normal years, and so had to sell some of their stock to reduce the expenses of winter upkeep, but in addition they were so hard pressed for money that they found it necessary to raise funds by selling stock they would have preferred to keep. Many ewes that should have been retained to build up the flocks this spring were sold off at a sacrifice. In spite of this, however, a fine lamb crop is expected, owing to the favourable weather and other conditions of the ramming season, and the winter months in general. Lambing will be on in early May over most of the range; a little earlier in some sections.

Shearing Wages.

The shearing season may develop some labour difficulties, though efforts are being made in advance to avoid any such trouble. The growers have taken a determined stand on the matter of wages for shearers, and the Shearers' Union of North America seems quite as determined on the schedule of wages which it will demand. There is a divergence of from 1½d. to 2½d. a head between the two, and some compromise or adjustment will have to be reached. The union has formally asked a scale based on a normal of 6½d. a head, plus board for the shearer, with variations from the schedule where peculiar local conditions warrant such action. The majority of the growers have pledged to pay no more than a normal basis of 4½d. a head, the shearer to board himself or to pay 4s. 2d. per day out of his wages for his keep. Conferences have been held, and further concessions sought by the union officials, who claim not only that their men cannot live on the 4½d. schedule, but also that there are within the union radical members who will be sure to make trouble, perhaps serious trouble, if they are not granted a higher rate of pay. The growers answer that while they wish to avoid trouble, they will not go beyond the schedule they have set, and that if the union workers do not wish to shear at that schedule they will make arrangements to have the shearing done by their own men, by farmers who are willing to take up the job, and by high school and agricultural college boys who can quickly be trained to do the work in a fairly satisfactory manner. Just what will materialise remains to be seen.

In both the cattle and sheep divisions of the industry reductions have been made in wages of herders, camp tenders and other employees. Herders who during the past two or three years have demanded and received from £20 to £50 and board, are now back again to from £12 to £17 a month, and the reduction, it is expected, will go lower as living costs decrease. There seems to be an ample supply of labour, owing to the increase in general unemployment, and the growers are not apprehensive as to getting sufficient employees at the reduced schedule of pay.

Miscellaneous.

According to revised census figures announced by the Bureau of Census, Commerce Department, the total number of sheep in the United States on 1st January, 1921, was 45,067,000, which was 95.7 per cent. of the total number the year before.

Willis Benson, of Burley, Idaho, has invented a rotary sheep-shearing machine, and is giving demonstrations in various districts. The shears work with a rotary motion, and are said to be much speedier than the older types of shears; also, it is claimed that the vibration is eliminated in large measure, and the wool stubble left higher where desired in colder climates.

According to a statement by the Institute of American Meat Packers, cold storage stocks of meat and lard in the United States were less by approximately a quarter of a billion pounds than on the corresponding day last year. The statement says the stocks aggregated 1,040,296,000 pounds.

How to Judge Fat Cattle.

Under the above heading in the "Breeder's Gazette," Mr. W. A. Dryden has the following:—

"In judging fat cattle first I like to satisfy myself as to general conformation by looking over the animal from a short distance. The impression gained at this distance would give an idea of the type, depth of body, thickness and general quality, which would include any tendency to coarseness or unevenness in general make-up. One thus gets an idea as to whether an animal is too wide and rough in the shoulder, too deep and heavy in front, in contrast to the depth behind, and whether carrying a belly or paunch like an in-calf cow. All of these points detract from general appearance, and, worse than that, provide a waste in slaughter which is not to the butcher's liking. Sometimes one is deceived by first impressions, but as a rule an animal that is rough and coarse in its bone and general make-up is rough and patchy in its flesh, and often more or less devoid of flesh in those places where it is most to be desired.

"At closer range it is well to look over the shoulder, and make sure that it is well laid into the body, that it is neatly joined by the neck vein to the neck, that the ribs are well-sprung, both fore and aft, and that the hooks are not too wide and protruding. Then, too, if the case in hand is not definitely decided by the casual look, it is safe to handle each animal a little. One sometimes can feel things that he cannot see, but first he must know what he is feeling for, and if the judge is not thoroughly acquainted on this point he is apt to err. A touch or two over the back and on the ribs should find flesh and not fat. There should be depth, evenness of covering, and no tendency to patchiness or undue fat. The faculty of knowing if one is feeling flesh, in contrast to fat, is not acquired by everyone in the cattle business, and if undertaking work as a judge where competition is keen it is a point that one should be well acquainted with.

"Given all other points in general conformation, if an animal is not a flesh-carrier it is not of much consequence to the butcher. A smooth, nicely-covered shoulder, deeply fleshed and wide over the crops, with plenty of loin, and a long, smooth quarter, with a deep, well-filled thigh, mean to him a good cutter, and one that will provide cuts of the best quality with the minimum of waste in general.

"In classes where competition is keen and animals are highly fitted, possibly the most important point for a judge to try to be sure on is the quality of the flesh rather than the quantity of the fat."

Staggers in Stock.

In the current issue of the New South Wales "Agricultural Gazette" Dr. Sydney Dodd, of Sydney University, and Mr. Max Henry, Government Veterinary Surgeon, publish the result of their investigations into the cause of "staggers" in live stock, which for many years has been a source of trouble to stockowners, particularly in certain areas in the basin of the Namoi and its tributaries, and also the Gwydir. The experiments have definitely determined the cause.

Sheep, horses and cattle are affected by the disorder. The condition of the stock makes very little difference, although it is widely held that fat animals most readily become affected. The probable explanation of this is that the causes of the trouble are most abundant in good seasons. Staggers is seen on river flats that produce a luxuriant growth of herbage, chiefly consisting of trefoil, mallow, crowfoot and shepherd's purse, in the spring.

It is now announced that the researches of the past year have definitely established that the complaint is of dietetic

origin, and not contagious or due to bacteria or other organisms. So far as has been seen, the two investigators say, it cannot be transmitted by inoculation from an infected to a healthy animal. The experimental investigations carried out, both in the field and at the University, proved conclusively that two plants at least are able to convey the condition known as staggers to sheep. These are the common mallow (*Malva parviflora*) and a plant closely allied to that, known as stagger weed (*Lamium amplexicaule*). The plant commonly known as stagger weed or hedge nettle (*Stachys arvensis*) is very widely held to be responsible for producing staggers or shivers, but in experimentally feeding it to animals no one has apparently succeeded in producing staggers.

In so short a time as 72 hours after placing them on a mallow diet the disease made its appearance in lambs. The plant will produce the disease in the young, green, and shooting stage, when well grown, and when dying off. Feeding with seeds alone has also induced symptoms. In the experiments both adult sheep and lambs, male and female, crossbreds and Merinos, were affected. Feed such as trefoil, lucerne and crowsfoot, although grown in the same paddocks, were proved not to produce staggers.

It is found that, so long as animals remain on the mallow or lamium feed, the condition continues; but if removed and placed on other feed, even in an affected locality, recovery is rapid and complete.

Regulating the Bull's Service.

The above subject is of considerable importance and one on which we would like to have the views of practical breeders. The fruit of their experience would greatly benefit many beginners, for there can be no question that a young bull may be seriously harmed or even permanently ruined by turning him loose with a herd of cows, and letting him serve at will, in which circumstances he might expend as much energy on one abnormal cow as he would if restricted to one service per heat period in a herd of 40 to 50 cows. The "Breeder's Gazette," an American contemporary, says "the number of services will, of course, depend largely on the way in which the bull is managed. That every bull may possess a maximum amount of muscularity, vigour, virility, and endurance, it is imperative that work or active exercise be enforced. That, of course, is obtained where the bull runs with the herd, but that practice is not a wise one on the average farm, although it is necessary on the range.

"If work in harness or a treadpower cannot be given, the bull should at least be allowed the run of a large yard, and given the companionship of some young bulls, or be allowed to butt at will a big empty barrel or a large smooth stump or block of wood suspended by chains from an overhead beam in the yard.

"It is important, too, that the bull should be so fed that he will be kept in proper breeding condition. 'Hard' feed is preferable for this purpose, by which is meant feed that will not keep the bowels too loose or unduly irritate the kidneys. It is therefore advisable not to feed large amounts of roots or silage, and not to make alfalfa the exclusive roughage. Mixed clover and timothy hay or straight, sound, bright clover hay is preferable. All feed offered should be free from mould, and not spoiled in any way. Mixed protein-rich grains and meals, rather than corn as an exclusive grain ration, should be allowed, and may include enough oilmeal to regulate the bowels. Pure drinking water should be abundantly supplied, and free access to rock salt allowed.

"By rights a year-old bull should not be used for service, but if well developed and properly fed and managed, possibly he may be allowed to breed one or two cows. From that age until he is eighteen months old five or ten cows will be enough, and between that age and two years he may serve up to fifteen cows; at two to three years old, fifteen to twenty-five cows; and when from three to four years old, thirty to fifty cows may be bred. The latter figure is considered the maximum number of cows to be bred by an adult, well-managed bull, and in all cases but one service should be allowed at each period of heat. There is no advantage in allowing repeated services, and they will but exhaust the bull and tend in time to make him impotent."

The Outlook for Wool

is uncertain at present. But its future should be secure. No substitute has yet been found to effectively take its place as a raw material for clothing. The trouble is—How distant is that future? Pastoralists cannot live on dim prospects.

Maybe a revival in trade is closer than information indicates. But the pressing problem is to turn the current clip into as much money as possible, as quickly as possible.

Wools must be offered in their due order. But when his turn comes the sheepowner is on safest ground who places his clip in capable hands.

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**The Gladstone Meat Works of
Queensland Ltd., Gladstone,
Queensland.**
BUYERS OF FAT STOCK FOR EXPORT.

Meat and Produce Trades.

Position and Prospects in Australia.

The Season.

Although the weather has been rather on the dry side since last writing, there is ample good feed for stock throughout Queensland, New South Wales, South Australia and the northern parts of Western Australia. Conditions over the bulk of Victoria are not so satisfactory. Pastures there are from fair to indifferent, and a steady, soaking downpour is needed to bring grass on before the cold weather sets in. The southern and central divisions of Western Australia have recorded good rains during the last few days.

Reports regarding the lambing are generally favourable. Unless something unexpected happens a record marking for the autumn drop is looked for in New South Wales, South Australia and Queensland. The ewes, in common with all stock, are in good condition, and the losses should be small. The great trouble at the moment is blowflies, which are particularly bad in many localities. The result of the lambing in Victoria depends largely on how soon the weather breaks. As a rule, ewes there are timed to lamb later than in the north, and a warm rain within the next couple of weeks should be in time to produce the green bite so necessary to the ewes. Showers have fallen in the southern districts since the beginning of May, but there has not been enough to make the position safe.

It is satisfactory to note that there has lately been a slight recovery in the live stock markets. Values for sheep and cattle had fallen steadily right through March and April, and the position was getting serious. Whether the better tone prevailing at the time of writing is to be permanent remains to be proved. The slump was mainly caused by the forcing on the markets of more stock than the local demand could absorb. Naturally, graziers did not choose to sell when values were away down, their hands being forced, for the most part, by the necessity of raising funds to carry on with. Unfortunately, the frozen meat export trade has not been able to do much towards stabilising values, owing to the uncertainty of the future for meat. Certainly, thanks to their competition, lambs have been kept at a fairly profitable level, but the outlook for mutton and beef, to say nothing of by-products, is such that they can only offer relatively low prices for prime wethers and bullocks.

Current Operations.

Most of the Queensland works are in commission, the principal exceptions being Redbank (Cooke's), and Bowen (Berg's). At the moment the Q.M.E. Co.'s works at Ross River, Townsville, are also closed, but it is expected they will reopen about the 16th instant. The A.M.E. Co.'s works at Brisbane, which were shut for most of April, commenced killing on 2nd May, and are putting through about 280 head of cattle and 1000 sheep per day, according to the latest advice. Only a short run is expected. Messrs. Borthwick's and the Q.M.E. Co.'s Brisbane works were each treating 280 head of cattle daily, besides a few sheep, and Birt and Co. 150 cattle. The Gladstone Works are reported to be killing about 280 head, Lakes Creek 220, Alligator Creek 500 and Burdekin 250 head of cattle daily. None of the northern or central works is touching mutton.

Evidently cattle in the north are killing well this season. A correspondent advises that a mob of 1200 bullocks from Richmond Downs, slaughtered at the Alligator Creek meat works, dressed an average weight of 926½ lbs., which is claimed to be a record in Queensland.

Some lambs have lately been bought for export in the Southern States, but the number going through the works is very small. Further, it is not at all likely that supplies will be available for more than a few weeks at the most. Shippers are paying about 24s. per head. Report says that certain exporters are making offers in the country for forward buying at somewhat higher rates. That would be for lambs fit to kill and ship next spring, when it is hoped the markets on the other side will be more stable.

Clearances of frozen meat from the Commonwealth last month to all overseas ports totalled 30,446 carcasses mutton, 38,686 carcasses lamb, and 87,262 quarters beef. Of these, 28,592 sheep, 37,497 lambs, and 81,252 quarters beef were consigned to Great Britain, the balance going to different ports in the East. Shipments for May will probably be in about the same volume as April.

A Brighter Time Ahead.

Mr. F. J. Walker, of the meat export firm of F. J. Walker Limited, who has recently returned to Australia from a trip to England, takes a hopeful view of the future of the trade. In the course of an interview on arrival in Sydney, he, after touching on the different factors that had led to the present slump, said in effect that he was confident the depression is only temporary, and that six months hence would see a material improvement. He went so far as to say that he thought the permanent change for the better would come sooner than many people in Australia believed.

Dealing with the position in general, Mr. Walker said:—

"The immediate trouble was that the European market had suddenly closed up. South America had been selling a large amount of meat to Europe, but Europe found that it could no longer pay, and meat cargoes were diverted to England. There is too much meat for England to absorb immediately. Frozen beef is selling in England for as low as 4½d. ox and 3d. cow per lb., sides, which, of course, makes it impossible for Australia to export beef. Mutton and lamb have not fallen quite so much, but the feeling is prices will get worse before they get better.

"The visible supply of meat is in excess of immediate requirements. South America and New Zealand both have large stocks. The result is that prices are down, sales forward extremely difficult, and the immediate outlook most discouraging. So much so, in fact, that the New Zealand season is being cut short, and most of the meat export companies in Australia (outside Queensland) are closed, considering that the risk is too great. One fact I would like to stress is that stocks of meat on hand are not alarming. It is not going to take 'years' to dispose of. War-time stocks are not so big now—much of this meat has gone into consumption.

"Another most important fact is that European countries are hungering for our frozen meat. Provide the means whereby they can buy it, and they will rush it. To my mind, the means will be found by way of credits. We have to face the fact that Europe can buy only if credits are re-established, and international exchanges righted. When international credits are established Europe will be a big buyer of our meats, tallow, hides, and wool. Once Europe is in a position to buy, all the markets for our staple exports will recover—and rapidly. As I see it, there will be no need for very long credits."

Mr. Walker mentioned that "there are two years' supply of tinned meats on hand, and that, therefore, the outlook for this line is not encouraging. Still, even here again, Europe would buy freely, if given credits. The tinned meat trade, however, is only a side-line, except in war time, and it is the frozen meat trade that particularly concerns Australia.

"During the war better-class retail shops in England handled frozen meat, and they will continue to do so. Further, many English people who had never eaten it before became accustomed to eating frozen meat, and they will go on asking for it. This means that as trade recovers there will be more people in England eating frozen meat, as well as the millions of new customers on the continent. Consequently, the long view is that frozen meat will be good business."

Sir Thomas Robinson, formerly Controller of Imperial Meat Supplies, and for many years Agent-General for Queensland, and who has lately come back to Australia, also holds the opinion that the depression is temporary. He takes the view that trade for imported colonial meats in Great Britain would not be re-established on sound lines until there was a large proportion of fresh meat arriving there, and made available for trade purposes. At present Government meat that had been held for some time was encumbering the market, and until that meat was out of the way ordinary trade in good, fresh meat could not be put on the usual sound footing. While there was any of the meat held in Government hands, and until the market had stabilised itself somewhat, traders were unwilling to adventure in new purchases. Broadly speaking, however, the outlook for frozen meat from Australasia must improve when things were cleared up and normal conditions were again reached, because there were now additional markets available on the Continent to colonial producers.

Later, speaking at a luncheon in Sydney, Sir Thomas sounded a note of warning, urging those responsible to send always the best qualities overseas. He pointed out that while people in Britain were rationed, and the meat supply was short, the consumer had to take what was offered. Some sellers had taken advantage of that and sold meat of poor quality. The good brands, known before the war, were forgotten. If good quality meat were sent in future the demand would very quickly be revived and stimulated.

Freight Rates.

The news that New Zealand exporters have entered into contracts with the shipping companies for the carriage of frozen meat at rates showing a slight reduction on those ruling in April is of great interest to the trade in Australia. The New Zealand charges for the balance of this season are to be:—Lamb, 2d. per lb., plus 5 per cent.; mutton, 1½d., plus 5 per cent.; beef, 1½d., plus 5 per cent. The same scale will apply next year, but less 2½ per cent., and should there be any general reduction in freights during the currency of the contract, the rates are then to be further reviewed. The charges obtaining in Australia at the present time are:—Lamb, 2d. per lb., plus 10 per cent.; mutton, 1½d., plus 10 per cent.; beef, equal hinds crops, 1½d. net; these are 5 per cent. higher all round. It is understood the export companies are moving to obtain a reduction. On the face of it there is no justification for higher rates from Australia than New Zealand.

The freight on frozen rabbits has been reduced from 184s. to 130s. per ton by all lines.

Mention was made last month of reductions in freight on tallow, hides, leather, &c. For some reason sheepskins are not sharing in the reduction, the rate on which remains at 297s. a ton, as compared with 75s. in May 1914.

Position in the Far North.

It is definitely announced that the Western Australian Government has decided not to operate at the Wyndham meat works this season. In making the announcement the Minister for the North-west said that the serious fall in prices, inability to obtain adequate shipping accommodation to carry out a full programme of freezing, and the refusal of the unions to accept last year's wages and conditions had been factors operating in forcing the Ministry to this decision. In preceding years the works were carried on at considerable loss, apart from interest and depreciation charges, and investigation showed that if the Ministry operated the works this season the loss would be increased to about £5 for each bullock killed.

In commenting on the position a man well acquainted with conditions in the north writes that he knows of no meat works proposition more difficult to handle than Wyndham. The cost of transport of operatives and materials 2000 miles from Fremantle, inadequate cold storage provision to reasonably insure against stoppage of operations through delays of overseas steamers, and the small crop of cattle as yet available are some of the handicaps. He adds that it seems to him that the western State is entitled to some of the consideration that has been given by the Commonwealth to the development of the tropical settlement of Australia in Queensland and the Northern Territory. He believes that it is not economically possible for the pastoralists of Kimberley, unaided, to establish a meat export trade, any more than the Queensland sugar growers could carry on with white labour in the absence of some form of protection.

We may point out that Messrs. Vestey Bros. are confronted with very similar problems in connection with their Darwin works, which, despite a huge investment of capital, they have not operated since 1919. The inadequacy of freight, low values of beef, dearth and uncertainty of labour appear to be the chief difficulties. The freight and beef positions ought to improve next year, but whether the labour unions will be more reasonable in their wage demands and give guarantees as to freedom from strikes is another matter. Unless they do it will not be surprising if both the Wyndham and Darwin works remain closed indefinitely.

Wages.

Claims for an increase of 10s. 6d. in the weekly wage, and a reduction of the working hours from 44 to 40 per week, have lately been made to the Queensland Arbitration Court by the Meat Industry Employees' Union. The court granted an increase in wages of 6 per cent., but refused to vary the hours. Mr.

Justice McCawley, President of the Court, also refused an application by the union for the restitution of the preference clause, taken from the employees of the Central and Northern Works some time back on account of strike tactics adopted.

Meat Flour.

Experiments have for some time past been carried out in New Zealand in the manufacture of meat flour or meal. It is understood that the process is patented, but apparently it consists principally of evaporating all moisture in the lean fibre of beef or mutton, and reducing same to a fine meal. It is claimed that the nutriment is left in, and Professor Worley, of the Auckland University, who has investigated the product thoroughly, reports that he finds it has considerable food value, and keeps well. Samples have actually been sent to America, the Continent and England, and arrived in good condition, although not carried as refrigerated cargo. Naturally, only second and lower grades of meat are being dried. Should a satisfactory demand spring up for the product many of the freezing works would doubtless instal plants.

New Zealand Frozen Meat Exports to the U.K. (Season taken as from 1st January to 31st December.)

PERIOD.	Mutton.	Lamb.	Beef.
	Carcases.	Carcases.	Quarters.
Total for 1911	1,792,067	3,326,843	147,154
Total for 1912	2,360,789	3,191,197	149,397
Total for 1913	2,210,648	3,399,119	127,495
Total for 1914	2,771,102	3,644,777	371,604
Total for 1915	2,929,412	3,806,421	526,119
Total for 1916	2,456,115	3,118,317	727,774
Total for 1917	1,964,530	1,550,712	615,867
Total for 1918	1,348,884	1,317,980	537,017
Total for 1919	3,645,704	3,376,168	554,363
Total for 1920	4,676,575	2,031,473	594,546
Monthly Totals, 1920.			
January	216,214	119,437	20,016
February	256,935	157,578	20,852
March*	243,434	112,624	16,615
April*	189,346	157,159	33,389
May	337,170	228,274	43,255
June	298,874	334,471	45,373
January to June	1,541,973	1,109,543	179,491
July*	519,521	363,743	102,626
August*	177,277	65,391	16,646
September*	453,148	155,064	112,958
October*	623,075	62,754	82,123
November*	598,696	30,854	—
December*	762,885	244,124	100,702
July to December	3,134,602	921,930	415,055
1921.			
January	475,507	5,269	3,179
February	330,321	111,267	63,800
March	358,933	352,377	106,756
April	215,134	367,413	52,983
Clearances reported for April—			
April 2—Norman Star ...	30,843	12,303	40,666
" 6—Zealandic	25,138	27,219	1,792
" 12—Rimutaka	42,137	54,465	1,300
" 15—Athenic	11,821	22,248	7,735
" 16—Maimoa	26,158	19,200	1,386
" 19—Ruapehu	16,096	53,850	139
" 20—Raranga	33,820	66,385	40
" 23—Otarama	5,566	—	—
" 24—Corinthic	23,555	56,466	1,125
	215,134	367,413	52,983

* In addition to the above, 279,088 carcasses lamb were shipped to U.S.A. in March, and in April 222,568 carcasses lamb to U.S.A. and 6851 carcasses mutton, 11,875 carcasses lamb to Vancouver, B.C., and in July 20,092 carcasses mutton, 360,493 carcasses lamb to U.S.A. In August 6529 carcasses mutton, 596,987 carcasses lamb to New York, 10,060 carcasses lamb to San Francisco, U.S.A., and 3500 carcasses lamb to Vancouver, B.C. In September 21,317 carcasses mutton, 438,544 carcasses lamb to New York, U.S.A., and 6000 carcasses mutton, 3281 carcasses lamb to Vancouver, B.C. In October 126,914 carcasses mutton, 212,710 carcasses lamb, 593 beef to U.S.A., and 1000 carcasses mutton to Vancouver, B.C. In November 106,426 carcasses mutton, 173,325 carcasses lamb to U.S.A., and 2000 carcasses mutton, 4533 carcasses lamb to Vancouver, B.C. In December 183,913 carcasses mutton, 104,190 carcasses lamb to New York, and 559 carcasses lamb to San Francisco.

Australian Frozen Meat Exports to United Kingdom.

(Only such vessels as have actually cleared the Australian Coast during any given month are included in that month's return.)

Month.	NEW SOUTH WALES.			VICTORIA.			QUEENSLAND. (Including Darwin.)			SOUTH AUSTRALIA, WEST AUSTR. AND TASMANIA.			TOTALS.		
	Mutton.	Lamb.	Beef.	Mutton.	Lamb.	Beef.	Mutton.	Lamb.	Beef.	Mutton.	Lamb.	Beef.	Mutton.	Lamb.	Beef.
Jan.	909,604	271,527	16,741	851,034	1,047,182	4,087	78,549	602	429,731	69,901	131,340	276	1,909,088	1,450,651	450,835
Feb.	808,188	294,424	8,477	518,855	735,621	9,074	681,957	40,424	1,046,000	82,582	117,901	2,846	2,091,582	1,188,370	1,066,397
Mar.	1,315,437	403,533	78,195	961,914	1,278,898	115,280	402,486	25,250	1,058,213	18,817	34,216	24,064	2,698,654	1,741,897	1,275,752
Apr.	1,529,702	552,569	135,730	738,774	1,196,410	130,957	628,176	37,301	1,584,946	35,051	81,233	24,396	2,931,703	1,867,513	1,876,029
May	291,486	361,843	551	—	47,546	—	263,565	52	903,582	—	—	—	555,051	409,441	904,133
June	436,943	205,695	54,780	52,927	365,274	20,230	432,571	1,722	1,541,782	—	—	2,622	922,441	672,691	1,619,394
July	81,776	14,052	7,483	48,783	146,903	—	45,026	10	1,399,836	2,212	952	602	177,797	161,917	1,407,421
Aug.	278,980	63,694	5,006	656,677	31,023	2,491	59,837	—	687,473	38,067	21,295	—	1,033,561	116,012	694,970
Sept.	828,413	293,992	21,910	2,261,411	1,526,578	13,559	182,597	1,132	749,998	309,113	95,417	7,162	3,571,534	1,917,119	792,629
Oct.	39,008	8,798	803	275,375	203,615	—	—	—	—	5,143	—	—	319,524	212,413	803
Nov.	65,579	11,861	1,609	355,202	172,179	3,350	—	—	—	38,984	24,818	—	459,765	208,858	4,959
Dec.	18,591	5,058	—	16,351	938	—	—	—	—	10,409	—	—	45,351	5,996	—
Jan.	52,771	10,227	319	124,740	47,828	3,822	49,383	22	54,074	—	—	—	226,894	58,077	58,215
Feb.	146,095	28,586	6,758	164,070	35,647	1,029	15,009	—	41,921	50,784	12,426	1,253	375,958	76,659	50,961
Mar.	130,704	30,663	12,144	13,262	730	—	—	—	45,734	—	—	—	143,966	31,393	57,878
Apr.	452,746	95,193	21,633	949,000	460,937	8,201	64,392	22	141,729	105,320	37,244	1,253	1,571,458	593,396	172,816
May	21,072	8,531	—	52,112	8,077	—	—	—	34,279	30,757	173	—	103,941	16,781	34,279
June	8,914	2,077	—	33,561	32,088	7,503	793	—	49,216	20,309	4,840	—	63,577	39,005	56,719
July	11,083	12,361	52	187,391	54,451	1,583	—	—	127,163	3,580	477	15,808	182,057	72,289	144,406
Aug.	14,791	325	—	56,140	19,819	1,833	—	—	104,018	4,853	5,539	—	75,784	25,753	105,851
Sept.	25,741	1,100	679	5,828	2,754	52	—	—	4,141	864	634	—	35,708	4,718	1,365
Oct.	1,618	5,933	—	2,100	14,451	—	—	—	58,954	13,850	123	—	17,568	155,512	58,954
Nov.	83,219	30,327	731	317,133	271,710	10,971	793	—	373,930	77,490	12,021	15,942	478,635	314,058	401,574
Dec.	9,720	21,717	752	3,851	7,216	—	—	—	53,271	1,345	1,946	—	14,919	99,909	59,023
Jan.	29,365	73,814	6,348	599	35,239	—	—	—	134,120	—	106	—	29,964	109,053	140,774
Feb.	1,988	23,891	4,118	—	—	—	4,028	6,267	39,366	—	—	21,048	19,016	35,163	64,552
Mar.	22,923	23,605	7,061	669	13,892	—	5,001	—	74,911	—	—	—	28,592	37,497	81,252
Apr.	—	—	—	669	9,633	—	—	—	—	—	—	—	669	9,683	—
May	9,342	10,434	—	—	—	—	5,000	—	19,180	—	—	—	14,342	10,134	19,180
June	3,161	6,381	3,052	—	4,209	—	—	—	1,842	—	—	—	3,161	10,510	4,894
July	4,744	549	4,009	—	—	—	—	—	18,302	—	—	—	4,744	549	22,401
Aug.	5,676	6,241	—	—	—	—	—	—	34,777	—	—	—	5,676	6,241	34,777
Sept.	22,923	23,605	7,061	669	13,892	—	5,000	—	74,191	—	—	—	28,592	37,497	81,252

1921.

TO OTHER PORTS.

April	1—Ventura—From New South Wales: 300 carcasses mutton, 2990 quarters beef, to Honolulu.
"	6—Changsha—From New South Wales: 700 carcasses mutton, 600 carcasses lamb to Hong Kong; 201 carcasses mutton, 206 carcasses lamb, 65 quarters beef to Manila. From Queensland: 384 quarters beef to Manila; 700 quarters beef to Hong Kong.
"	9—Montoro—From New South Wales: 613 carcasses mutton, 343 carcasses lamb. From Queensland: 52 carcasses mutton, 1777 quarters beef. All to Singapore.
"	23—Melusia—From Queensland: 42 quarters beef to Rabaul.

The clearances of frozen meat from the Commonwealth to all overseas ports during April totalled 30,446 carcasses mutton, 38,686 carcasses lamb, 87,262 quarters beef, which compared with the output for March, shows an increase of 1933 carcasses lamb, and a decrease of 137 carcasses mutton and 28,065 quarters beef.

When placed beside the total for the corresponding month of last year (April 1920) there is an increase of 23,595 quarters beef, and a decrease of 222,778 carcasses mutton and 22,257 carcasses lamb.

An analysis of the various exports for the month under review shows that 28,592 carcasses mutton, 37,497 carcasses lamb, and 81,252 quarters beef were consigned to Great Britain. 300 carcasses mutton, 2990 quarters beef to Honolulu, while ports in the east take the balance, viz., 1554 carcasses mutton, 1189 carcasses lamb, and 3020 quarters beef.

Queensland sent away 5000 carcasses mutton, 77,146 quarters beef; N.S.W. 24,777 carcasses mutton, 24,794 carcasses lamb, and 10,116 quarters beef; Victoria 669 carcasses mutton and 13,892 carcasses lamb.

Meat Notes.

Nelson Bros. Limited have declared an interim dividend of 4 per cent., tax free.

Exports of frozen meat from South Africa during February totalled only 286 quarters beef, shipments for the first two months of the current year being 772 quarters.

The New Zealand Freezing Workers' Union has voted in favour of joining the Alliance of Labour.

The restrictions on imports into Germany of beef, pigs, and lambs on the hoof, as well as fresh meat and bacon, have been removed as from 15th February. Inspection regulations remain in force.

Stocks of frozen meat in cold store in the United States on 1st February, 1921, were substantially larger than those a month previously. Mutton and lamb, which at the beginning of January stood at 68,000,000 lbs., had increased to 78,000,000 lbs., while pork jumped from 94,000,000 lbs. to 146,000,000 lbs. The holdings of beef were practically unaltered, at 120,000,000 lbs.

The statement made at the annual meeting of Bovril Australian Estates Limited by the chairman, Sir C. H. Rason, shows that the profits for 1919 were £20,768, compared with £20,368 in 1918. The amount carried forward is £114,811. A dividend at the rate of 7 per cent. was confirmed, with additional dividends of 1 per cent. for 1917 and 1918. The company owns and operates Victoria River Downs Station, in the Northern Territory.

A co-operative company has recently been formed in Paraguay, states "The Review of River Plate," to facilitate the export and sale of cattle from that country. The necessary means of transport are to be acquired, and slaughtering at saladeros carried out. The formation of this new company shows the interest Paraguayans have in finding the best outlet for their surplus cattle. Considering that there is not a sufficiency of stock to keep the three principal meat works running, there does not appear to be much need for this latest company, as far as handling

the supply of fat cattle in that Republic is concerned. The leading works already operating in Paraguay are North American-owned concerns, where the most appropriate machinery and skilled experts are employed to ensure the best results from the produce handled. Some may not have given the desired results in their production of canned goods, but still they are in a far stronger position than a newly formed native company is likely to be in for a long time to come.

Australian Frozen Meat Exports to Ports other than in United Kingdom.

(Season taken as from 1st July to 30th June.)

Period.	Mutton Carcases.	Lamb. Carcases.	Beef, Quarters.
Season 1911-12	167,120	26,480	197,479
1912-13	166,474	27,313	206,982
1913-14	224,283	33,529	279,353
1914-15	91,725	806	208,827
1915-16	20,814	10,750	34,902
1916-17	15,785	8,025	13,560
1917-18	320	—	4,171
1918-19	33,039	6,950	26,891
1919-20	154,968	41,612	99,869
Monthly Totals, 1920.			
January	43,402	14,066	5,202
February	26,591	3,501	2,278
March	22,800	2,960	8,671
April	26,330	2,866	5,452
May	4,565	1,032	3,584
June	7,567	9,127	4,111
January to June	129,255	33,552	29,298
July	49,628	2,598	63,707
August	6,305	1,085	1,776
September	4,609	2,675	8,035
October	32,508	1,050	2,307
November	6,386	1,370	6,895
December	1,820	1,619	3,432
July to December	101,256	10,397	86,152
1921.			
January	7,053	7,401	6,534
February	7,420	2,027	4,942
March	11,567	1,590	59,775
April	7,854	1,189	6,010

South American Cable Service.

(FROM OUR OWN CORRESPONDENT.)

SOUTH AMERICAN FROZEN AND CHILLED MEAT EXPORTS.

Period.	Mutton.	Lamb.	Beef. Qrs.
Total for 1911	8,048,262	1,092,155	3,807,320
" 1912	2,500,000	815,000	4,030,000
" 1913	1,909,061	671,290	4,477,160
" 1914	1,878,578	805,296	4,375,019
" 1915	921,436	442,132	3,581,842
" 1916	1,190,524	637,180	3,650,000
" 1917	783,250	408,250	2,795,500
" 1918	1,272,717	236,822	6,081,660
" 1919	1,462,366	216,014	5,119,923
" 1920	1,393,923	527,317	4,804,562
Monthly Totals—1920.			
January	95,487	7,616	419,810
February	124,306	22,836	419,027
March	76,952	3,271	473,444
April	108,578	69,594	420,881
May	25,000	32,000	174,500
June	45,000	32,000	375,000
January to June	475,923	247,317	2,282,662
July	223,000	50,000	432,900
August	145,000	27,000	527,000
September	182,000	44,000	485,000
October	184,000	59,000	468,000
November	78,000	18,000	282,000
December	106,000	82,000	349,000
July to December	914,000	280,000	2,621,900
1921.			
January	91,000	64,000	308,000
February	120,876	129,266	422,551
March	89,600	160,600	428,000
April	169,000	188,000	481,000

Position and Prospects in New Zealand.

(FROM OUR OWN CORRESPONDENT.)

CHRISTCHURCH, 1st May, 1921.

The freezing works are doing a little more than they were a few weeks ago, but buyers are only looking for lambs and light-weight sheep. Fat sheep above the weight that the exporters require are making very low figures, and there is little demand for beef for freezing. Stockowners are, therefore, having to face the carry-over of an unusually large number of stock, and feed prospects in most districts are none too good owing to the absence of sufficient rain during the autumn. A good many farmers are having their sheep and lambs frozen and stored in the works in the hope of an improvement in the market, but it is only men who can afford to lie out of their money who are able to do this. The high shipping rates for produce have caused a great deal of complaint and many discussions, and a new contract is to be entered into between the freezing and shipping companies, but the relief will not be very considerable. One drawback to obtaining cheaper freight is that imports are now likely to fall off very considerably, as the country has lately been flooded with high-priced goods in fulfilment of delayed orders. Steamers are therefore likely to find a difficulty in finding cargoes to bring out.

A New Freight Contract.

Although there was some strong opposition shown by producers at the recent producers' conference to a further contract with the shipping companies for the carriage of frozen meat, the proposal was supported by the representatives of the freezing companies. The following resolution was agreed to:—

"That until the producers and the freezing companies have independent resources for self-protection in the matter of freights, a contract of some sort with the shipping companies is unavoidable; that any movement by the producers and the freezing companies to obtain such independence can be effective only after next freezing season; that as 4¼ million freight carcasses are expected to be in store at the end of June next, to make no provision for lifting this with next season's output would not be safe business, and would probably prevent c.i.f. sales taking place. The freezing companies therefore recommend that a contract should be made at the lowest rate obtainable to cover the whole of next year and the remainder of the present season."

The final draft of the contract has now been completed by a committee set up for the purpose. The contract is between the shipping companies and the freezing companies, and it is binding for the balance of the season and the whole of next season, a total period of about fifteen months. The freight rates proposed by the shipping companies at the time of the conference would have given a saving to the producers of about £135,000 on a full season's shipment of meat, as compared with the then existing rates. A further reduction, involving a saving of about £250,000, has since been conceded by the shipping companies. The rates are still very high, but they are considered to be the lowest obtainable. The committee approved of the contract, and decided to notify the freezing companies accordingly.

A Suggested Shipping Loan.

To get over the freight and shipping difficulty in New Zealand, Mr. Bernard Tripp, whose late father was a well-known Canterbury pastoralist, suggests that the Government should float a loan of £4,500,000 in England next November, to be called "a shipping company loan." The money, it is further suggested, should be handed over to the Producers' Committee in Wellington, who would devote it to the purchase of twenty steamers of 10,000 tons each, the steamers to be converted into insulated vessels, with some passenger accommodation. Steamers, he says, can now be purchased at £12 per ton, or less, and the cost of insulation would be about £80,000, so that they would cost the company not more than £200,000 per steamer. To pay interest and sinking fund on the loan, legislation would be necessary to impose an import and an export tax of 2 per cent., which would bring in an average of about £600,000 a year. The importers and exporters, Mr. Tripp claimed, would more than save the tax by the reduced freights, and when the loan was repaid the tax could be removed. The Producers' Shipping Company, after

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providing for a renewal and depreciation fund, should put all profits towards reducing freights and passenger fares, instead of paying dividends. The Government would have the right to appoint two nominees on the Producers' Shipping Company until the loan was paid off.

Armour and Co.

At a recent conference of producers' representatives at Wellington, the chairman, the Hon. W. Nosworthy, Minister for Agriculture, in replying to observations by Mr. A. L. Rutherford, said that Armour and Co. had received legal advice that they had a right to go on, and they had been operating in this country up to the present with practically a free hand. The trusts had brought meat down from 10d. to 6d. per lb., and it was useless to blame the policy of the Government. They had been blocked with the export license, but it had only been applied a few weeks ago. They had the works full of meat. Mr. Rutherford: "Why not let them get it out?" The chairman said they were not going to let them get it out. That was the policy of the Government, and it was going to sift the matter to the bottom in the interests of the producers.

South Otago Freezing Company.

A large number of farmers are taking advantage of the opportunities offered by the South Otago Freezing Company, and are freezing on their own account. In view of the prices which local buyers are offering for mutton, these farmers stand a very good chance of doing much better for themselves than they would if they sold locally. The directors of the company have under consideration the matter of the appointment of an agent in London.

Proposed Amalgamation.

Meetings of directors of the South Canterbury and Waitaki Farmers' Co-operative Freezing Companies have lately been held to consider the question of amalgamating and building one works a little south of Timaru, instead of one by the farmer company north of Timaru, and another by the latter somewhere near the Waitaki.

Otago Freezing Works.

Freezing works in Otago will have, it is anticipated, but a short season. Up till the 16th April the works at Burnside had put through 58,846, which compares unfavourably with 100,945 at the corresponding time last season—about 40,000 behind. In cattle, Otago will be over 1000 behind.

American Meat Packer Divestment.

The Supreme Court of Columbia has, states "The Producer," authorised the sale by Messrs. Armour and Co. of their interests in the Chicago stockyards to Messrs. F. H. Prince and Co., of Boston. The company owned twenty shares, for which the Boston firm is said to have paid one and a-half million dollars, say, £300,000. Messrs. Prince already owned the remainder of the shares in the Chicago yards. The court has also consented to the sale by Armour and Co. of their forty shares in the Denver stockyards to Mr. George Grainger.

As regards the other packing companies, progress is being made in the disposal of their stockyard holdings. The court has intimated that the scheme submitted by Morris, Wilson and Cudahy for the surrender of their interests to a trust company, to be named by the court, is closely in line with its ideas.

London Meat Quotations.

The following quotations have been cabled by the Incorporated Society of Meat Importers:—

18th April, 1921.—Beef—Frozen, Argentina, 5d. to 9½d.; chilled, 6d. to 11½d.

25th April, 1921.—Beef—Frozen, New Zealand, 4d. to 5½d.; Australian, 4d. to 6d.; Argentina, 4¾d. to 8½d.; Uruguay, 4d. to 6½d.; chilled, Argentina, 5½d. to 10½d.

2nd May, 1921.—Mutton—Canterbury, 8¾d.; South American, 7d. to 8½d.; Beef—Frozen, New Zealand, 3½d. to 5½d.; Australian, 4d. to 5½d.; Argentina, 4½d. to 8d.; Uruguay 4d. to 6d.; chilled, Argentina, 5½d. to 10½d.

9th May, 1921.—Mutton—Heavy Canterbury, 8d.; South American, 7½d. to 8½d. Beef—Argentina, 4½d. to 8½d.; Uruguay, 3½d. to 6d.; Chilled, Argentina, 5d. to 11d.

Position and Prospects in Great Britain.

(FROM OUR OWN CORRESPONDENT.)

LONDON, 24th March, 1921.

The Current Situation.

Just seven days prior to the disappearance of the Ministry of Food, the frozen meat trade is wondering what course prices are going to take now that Easter and the spring trade are upon us.

The glut of meat that has recently poured into the country has, in the minds of most people, dissipated the last excuse that the Government might have had for continuing maximum prices after the end of this month. That excuse lay in the possibility of prices running away to a high level again, with the consequent burden on the public, but the recent break in rates has pointed to the improbability of such an occurrence.

The Americans have largely contributed to the flood of meat that has been pouring upon the market. The Big Five rarely fail to show their hand of concerted policy in their trade movements, and besides their piloting the big lot of New Zealand lambs on to the English market via the States, they have worked the South American chilled beef business very energetically of late. In February 10,107 tons of the meat was imported into the United Kingdom, as compared with only 4778 tons in the preceding month of January.

To-day Mr. American has the meat to sell, where most others have not—that is, bright meat, which the butcher is keen after. Mr. American is also apparently quite happy in seeing prices fall away rapidly. Low prices will, to all appearances, help him to keep a stronger hold of the market when the trade is freed after the 31st inst.

There are those who carry the argument further, and I am not sure there is not a lot of truth in their conclusions. They are forming the idea that the American firms are going "all out" this year to slump prices for the season, so that the British section of the business will feel the draught to the full. It is a game of long odds, but the Yankees, who made four times their ordinary profits in the war, can stand the bleeding process better than their antagonists, and the fight is apparently well begun.

A visit to West Smithfield at the present time would convince the spectator of the upper hand that the Americans have got in the frozen meat market. The best looking meat on the market to-day is the South American mutton and lamb shown at the stalls of Swift's and Armour's, and although its quality is not over good, its freshness gives it the maximum price, where other stuff fails to reach this on a heavy market. The Yankees have the bright beef too, and so they have, as usual, the pull on the rest of the trade.

In the existing market slump frozen beef has had a very bad time, and holders have been almost unable to make any movement of their stocks. The period must have been a very awkward one for the principal operating firms in this market, as the gigantic purchases from the Government have found the British market at present quite incapable of taking up this meat. In many cases it has only been possible to market Australasian beef on Smithfield by breaking it up and disposing of it in cuts at nominal prices. It has been a period when bright meat alone has cleared. Heavier weights of sheep have been at a terrible discount, New Zealand ewes, for instance, only making about 7½d. per lb.

Australian wethers have lately been sold at 8½d. per lb., but this rate cannot be a profitable one to sellers. There have been hardly any Australian ewes present on the market. Tegs seem another undesirable stock on the market just now, even 9d. being an unattractive inducement to purchase.

The cold stores of the country are apparently in for a good season, supplies having so accumulated on the threshold of spring as to assure the public stores of the country being filled to their utmost capacity for weeks, possibly months ahead, and this position should rule again towards the end

of the summer, when much of the delayed imports are expected to be uncleared.

Smithfield Supplies.

During the past three weeks, since the despatch of my last London Letter, the total supplies of all kinds at the London Central Markets totalled 23,065 tons, as compared with 20,432 tons in the corresponding period last year, and 26,568 tons in the corresponding period of 1914.

Of the pitchings at Smithfield in the period under review of this year, 3628 tons were of British and Irish beef and veal, mutton and lamb, and pork, &c., and 17,798 tons imported. Australasia's share of the mutton and lamb supply amounted to 6027 tons, and South America's portion of beef and veal pitched at the markets totalled 8355 tons.

The latest prices at Smithfield, current on the market yesterday, are as follows:—

Home-killed meat—	Per 8-lb. Stone.
Scotch, short sides beef	12s. 8d. to 13s.
English, long sides beef	11s. 4d. to 11s. 10d.
English mutton	13s. 4d. to 14s. 8d.
English ewes	8s. to 9s. 4d.
Controlled maxima for imported meat—	
Beef, hindes	8s.
Beef, fores	5s. 4d.
Mutton, carcass	6s.
Lamb	8s. 8d.

Exit the Food Controller.

In view of the definite decision to close down the Ministry of Food as a Government department on the last day of this month, it is to be presumed that the Board of Trade will once more take over the duty of clearing up the accounts of the Government's remaining meat, which is being finally marketed during the next month or so.

The Food Controller has made practically a final statement, a sort of apologia on getting out. Mr. McCurdy claims that his business has involved a turnover of more than £1,000,000,000 sterling at a net profit amounting to less than one-tenth of 1 per cent. Mr. McCurdy adds that the Ministry has tried to avoid making any profit at the expense of the consumer. There will be a good deal of cynical demur at this statement, both among producers, importers, and others. For months, almost years, it seemed, on end, the Government was very obviously trading on a margin which, viewed from the point of ordinary business, was huge. For months their big purchases were disposed of on a 3d. per lb. margin of profit, that is, as far as any conceivable ordinary administrative charge could be reckoned, and if, as Mr. McCurdy says, they have made little or no profit at the end, it is only because the big blunders and consequent big losses have swamped it.

The Ministry's clinging to office has involved a large part of this loss for itself, and incidentally for everyone else involved. Among the losses it has made have had to be counted the one or two large bad debts incurred through the failure of firms acting as agents, and I believe that the root cause of the Ministry being involved in at least one of these was the inefficient accountancy system which it inherited from the Board of Trade when the control last came through to the Ministry from the Board.

Perhaps most of the sin charged against the Ministry of Food lies in its unscrupulous attempts to bolster up its position after the war, in order to justify existence which should have been ended as promptly as possible.

As far as its meat operations have been concerned, its three directors of meat supplies, successively, Mr. Sidney Young, Sir Francis Boys, and Sir Philip Proctor, have at any rate figured well before the trade in the most difficult of circumstances. Perhaps Sir Philip Proctor has had the hardest task of all, namely, to justify himself when the Ministry was least popular, and it is saying much for him that he goes out of office lacking none of the great esteem in which he was widely held before he entered it.

A Meat Exchange.

I have heard mention in Smithfield lately of a proposal to form a meat exchange in the vicinity of the Central Markets. This is not by any means a new idea, but the suggestion has

previously dropped each time it has been raised. Whether or not now that the new era stretches before us its revival will mean its adoption remains to be seen. The Incorporated Society of Meat Importers has regarded the matter favourably, but the frozen meat trade does not seem to be very enthusiastic about the idea. As a matter of fact, all Smithfield is really a big exchange where deals are made in the street and offices, and very largely over the telephone, it being the common practice for a sale to be effected over the 'phone, and completed often without confirmation. It is well that in the Metropolis meat men can still do business on the strength of each other's word. Of course many operations in the wholesale meat trade are carried on under as much secrecy as possible, in view of the undesirability of a lead being given to competitors, and the argument is advanced to me by more than one wholesaler that as he would not be able to attend an exchange every day, his appearance to buy or sell on certain occasions would, to some extent, neutralise the effect of his operations. That is the stock argument against an exchange, but there are many stronger things to be said on the other side.

Importation of Live Cattle.

Reckoning the importance of topics by the noise created in discussing them, the agitation for the lifting of the embargo from the importation of Canadian cattle into Great Britain, which has reached its zenith this month, carries the palm over all others.

There has been more behind the scenes than in front in connection with this public controversy, and the importance of the issues involved, while it may be considerable to those on both sides, is nothing like the dimensions claimed for it in the public interest. On the one hand, we have the live stock breeder of Great Britain resolutely refusing to entertain anything in the way of a loosening of the prohibition on live imports, and in this position they are entrenched by the official attitude of the Ministry of Agriculture, and all the chief breeding and other kindred societies throughout the land. On the other side there is a rather motley collection of protagonists, all of whom profess to be carrying on the warfare on behalf of the British consumer—that is all save those who speak for Canada alone.

The most ridiculous contention made by the live imports protestants is that the 200,000 or so cattle which they maintain would come across the Atlantic if the embargo were removed, would reduce the price of beef in Great Britain as much as 6d. per lb. This idea is absurd, as such an import is rather less than 2 per cent. of the meat consumption of the country, and could hardly be expected, if at all, to affect prices more than a farthing.

My readers will have seen that the Prime Minister has agreed to a Royal Commission to investigate this question, but it must not be supposed that the fort has been won by the aggressors.

A Meat-handling Reform.

If the omniscience of the Northcliff Press is to be relied upon in this instance, there may be not far distant a reform in regard to meat handling in Great Britain, which, although advocated for many years, has never been attainable hitherto. Apparently the Ministry of Health is to be the instrument by which the better conditions may be ushered in. There should be, says the "Daily Mail," a radical overhaul in the slaughtering and distribution of meat if the report of the Ministry of Health Committee, now considering the matter from the standpoint of public health, comes up to expectation. The practice of carrying uncovered meat in open carts through the street is a long-standing offence, and the exposure of uncovered meat in shops is a constant menace to health.

Apparently, the report is to condemn, and a subsequent order forbid, the practice complained of, and, if so, a step of great importance in the handling of frozen meat at the consumers' end in the biggest market of the world will have been taken.

I have many times stated how incongruous was the sight of first-class frozen meat being landed under the best conditions on our quays, and a portion of it that did not go to store immediately carried away in dirty open carts, that of-

fence being repeated after it had been disposed of in the public markets. Evidently the underwriters have been asleep all along, as they could under such bad conditions have claimed immunity from those responsible for damage occurring during the 30 days on land included in the marine policy. The Ministry of Health will have added a real leaf to its laurels if it does as has been forecasted.

France's Appetite for Frozen Beef.

One of the main reasons given for the present glut on the British Meat market is the diversion of a good deal of meat from the European market. Apparently, the likelihood of this was better known in one or two quarters in London than among the main body of the trade, and some comment is made on this score. However, it appears that, either because of lessened appetite or inability to pay, Europe is not the customer she was for frozen meat. It may be that the present development is an aftermath of our crowding any kind of frozen stuff into her ports under the control regime. At any rate the following remarks in a Paris paper rather point this way:—"After being provisioned with beef from England our country now renews its acquaintance with the good meat of the River Plate, recently killed, and received without manipulations and successive reshipments. It is time that 'la bonne frigo' returned. Beyond the fact that 'bad money chases the good,' inferior imported meat was disgusting the public."

During the short space of three months over 28,000 tons of frozen meat were absorbed on the French market, of which about 20,000 tons were of second, third, or fourth quality. Some of the lots which went to make up this supply were 6000 tons of prime Patagonian mutton, 2000 tons of mutton imported through England from different sources, 3200 tons of Canadian beef of varying dates, 4000 tons of South African beef very mixed, 3000 tons of similar beef from Brazil, 6000 tons of beef from Australia and New Zealand, coming from the liquidation of the stocks of the British Government, and all more or less old, nearly 4000 tons of small meats from Madagascar and Venezuela, suitable for sausages, and 2000 tons of beef from South America rather old.

By the way, authority to import meat into France is now given by the Ministry of Finance on a request addressed to the Service du Ravitaillement, 123 Avenue des Champs-Élysées, Paris. Applicants must indicate (1) nature and category of the meats to be imported; (2) the source and date of killing; (3) the tonnage; (4) the names of the ports of loading and discharging; and (5) the maximum price, ex store, at which the goods will be offered for sale in France. If a higher price be charged further authority to import will be refused. The permits in any case are only available for two months.

Firms' Reports.

L. C. Ballantine and Co. (South American Supplies Excessive), 21st March, 1921:—"Supplies of beef from the River Plate, Monte Video, and Brazil having been excessive, prices have fallen considerably, and Australasian beef is meeting with a very limited sale at reduced prices. Mutton is slow, ewes particularly. Lambs direct from New Zealand very short, but plentiful supplies of New York/New Zealand, which fetch 12½d. ex ship. Home-grown meat weaker, but still quite dear."

The Colonial Consignment and Distributing Company Limited (Better Tone at Reduced Prices), 21st March, 1921:—"During the past four weeks the London and provincial markets have been more than amply supplied with meat of all descriptions, particularly beef. South American beef of bright and good quality has been very plentiful, and has held a predominant position in the market to the exclusion of Australasian. Even home-killed beef has declined in value, and with the approach of Easter, when the demand for meat is usually directed to lamb, further reductions in price will probably have to be made. Very large quantities of Montevidean beef have been on offer in all markets, and although plain, the meat is bright, and hindquarters have sold round about 8d. per lb. and fores at 6d. per lb. This cheap beef has seriously interfered with the sale of other South American descriptions as well as the Australian. Frozen mutton has been a dragging sale, and buyers have been compelled to accept lower rates in order to clear. Frozen lambs have been in ample supply. Large quantities of New Zealand lambs have reached this market via America. The condition of most of these is far from satisfactory. At the

time of writing there is a little better tone in the market, and the reduced prices have enabled a clearance to be made at Smithfield.

Henry S. Fitter and Sons (Effect of New Zealand Strike), 22nd March, 1921:—"The supplies of meat have been greater than the slow demand, a large proportion having been sold at less than Government control prices. The recent strike in New Zealand has delayed the shipment of some of the last cargoes of Government meat, and held up the first free consignments, so that New Zealand new season's lamb will not be available in any large quantities for some weeks to come. Large quantities of New Zealand mutton and lamb reshipped from America are still arriving. Good straight lambs are still hard to obtain in quantities required for the Easter trade, and cut lambs are not meeting with such a good demand. There has been quite enough frozen mutton to meet requirements, and although there has been a fair demand for small carcasses, the larger ones have not realised the maximum prices. A plentiful supply of good quality Argentine beef has not maintained the full maximum price, the market being rather over-stocked. Good small English and Dutch pigs have made rather higher prices, and the trade generally has improved. Frozen pigs remain about the same."

Gordon, Woodroffe and Co. (Supply Exceeds Demand), 21st March, 1921:—"At the present time the supply of imported meat exceeds the demand, and New Zealand lambs ex United States can be bought at 12½d. delivered. Government stocks of lamb consist mostly of cut lamb, and the trade is, therefore, not very keen at the moment, owing to the supply of whole lambs available from America. Mutton is difficult to dispose of, except lightweight wethers, and ewes can be bought from buyers who have over-stocked at less than control prices. Beef is also quoted at considerably below control prices, and is likely to go lower owing to the heavy arrivals from the Argentine and stocks which have been diverted, and in some cases reshipped ex store from the Continent. In view, therefore, of the fairly heavy stocks on hand forward buyers are not operating, as they are of opinion that shipments from New Zealand will be heavy, and that trade in the United Kingdom cannot stand the high prices at present demanded."

The National Mortgage and Agency Company of New Zealand Limited (A Slow Trade), 14th March, 1921:—"A pronounced change has taken place in the condition of the market during the past month, trade having dropped from brisk to very slow. Butchers who were only too glad before to get beef and mutton at maximum prices are now bidding for it, and are able to buy as many lambs as they require. Straight lambs are inquired for, but cut lambs are difficult to move. Frozen mutton has not been in much demand, and the sale has been slow."

General Paragraphs.

It will be remembered that, as the result of a resolution passed by the Imperial War Conference in 1918, an Imperial Shipping Committee was appointed, with Sir H. J. Mackinder, M.P., as chairman, to investigate the question of the liability of shipowners by clauses in bills of lading and certain other matters relating to such bills. The committee's report has been issued this week. This unanimously recommends uniform legislation throughout the Empire on the question of the limitation of shipowners' liability under the bills of lading, on the lines of the existing Acts, but based more precisely on the Canadian Water Carriage of Goods Act 1910, subject to provisions in regard to (1) exceptional cases in which goods can be carried at owners' risk; (2) precise definition of physical limits to shipowners' liability; and (3) fixing of maximum monetary limits of liability. The report deals with methods of deciding upon exceptions and limits, and proposes the establishment of a special body, common to the Empire, to handle such questions. The constitution and functions of this body are deferred for a later report. A distinction is made between navigation risks and carriers' risks. It is not suggested that shipowners should be liable for the former, which are risks due to the perils of the sea and to other incidents of navigation; but legislation is proposed in respect of the latter, which are connected with loss of or damage to goods arising in the course of their receipt, stowage, custody, and delivery by the shipowner and his servants. This distinction is made by the Canadian Act.

The Cold Storage and Ice Association of London has elected as its president for its twenty-second year of existence a well-known frozen meat and produce importer. Mr. George Goodwin, who succeeds Sir Thomas B. Robinson in the presidential chair, has been a prominent figure in the trade since its establishment in 1880, in which year he, as a young man, made a report on the pioneer arrival of frozen meat on the "Strathleven" on behalf of the New Zealand Loan and Mercantile Agency Company Limited, with which he was in those early days connected. His partnership with Mr. William Weddel has been a famous one, and in all of the big movements of the industry he may be said to have taken a

part, right from the early days of the Frozen Meat Trade Association up to the present. It is well known that his pen is responsible for Weddel's Annual Review of the Frozen Meat Trade, which is a classic annual much sought after in both hemispheres.

There has been recently announced in London that the Fourth International Congress of Refrigeration, which it was proposed to hold in 1922, has been postponed until 1923, as arrangements in the present conditions of international relations have been delayed considerably in the fixing up of the representation of several countries on the scientific and other commissions controlling such congress. Doubtless all sections of the industry will be better prepared for the great meeting in the later year in view of the concentration and effort which has to be made now upon the consolidation of post-war trade.

Again the Americans are leading the way in handling methods in London. The Port of London Authority is arranging to equip at the Tidal Basin for the use of the American firms of Messrs. Armour, Swift, and Morris a berth for handling foodstuffs mechanically. The installation is to be on the very latest lines, and will probably be the most modern and complete plant of its kind extant. It will include elevators, overhead runways, electric truckage, and icing and ice crushing machinery, and will be capable of handling 1800 tons of chilled or frozen beef per day. The nearest cold store to the installation will be that in the Victoria Dock.

The meat killing works of the Irish Packing Company Limited at Drogheda have for the time being ceased operation, owing, it is said, to trade depression. The board has accepted the resignation of the managing director, Mr. Frank Knowles, who is reported to be suffering from a breakdown in health. As soon as trade conditions improve, killing operations, it is understood, will be resumed, the plant having been pronounced by independent experts to be the finest and most up to date in existence.

Australian and New Zealand Produce in London.

LONDON, 24th March, 1921.

Canned Meats.

There is no change to record in the position as regards canned meats and markets since the despatch of my last London letter. Australian corned beef is being offered as low as 37s. 6d., Alexandra, and is not selling. Some of these very low prices, in fact, seem to be defeating their object; buyers are suspicious that these particularly low rates mean indifferent goods. I hear that Plate 1's corned beef can be bought ex French Government stores at about 6s. 6d. to 6s. 9d. per dozen tins.

Nominally, quotations to-day for Australian beef are still about 50s., but really fine quality can be bought cheaper, and the range is from 44s. to 48s. for beef, 56s. to 62s. for mutton. Boiled beef is about 60s., and boiled mutton about 65s.

Meat extract is still on fair steady trade at about 3s. 6d. for best packs.

Butter.

The general position in the butter market is very little different from when I last wrote. Consumption in this country is increasing, but large stocks are arriving here, and the quantity on hand is accumulating. It is believed that when butter is freed from control at the end of this month it will become much cheaper, and the retail price during the summer may be in the neighbourhood of 2s. per lb. The Government's stock of butter at the end of this month will, it is estimated, be in the neighbourhood of 50,000 tons altogether, including butter afloat and that due to be shipped, notably Australian, New Zealand, and Argentine. The desire on the part of New Zealanders to sell a portion of at least their April make in advance has not met with any success in Tooley-street. [Cable advice dated 8th May states that the Government has reduced its selling price of N.Z. butter to 192s., Australia to 186s., and Argentine to 168s. Despite the big reductions, however, N.Z. and Australian are still neglected, as Danish has also come down to 190s., and being fresh, is preferred to old Colonial stocks.—Ed.]

Tallow.

There have been no public auctions of tallow since that held in the last week of the despatch of my last London letter. The demand for home consumption is very poor, and exporters are only buying occasionally on a small scale. Very few transactions are taking place privately, and prices are mostly moving 6d. to 1s. per cwt. downwards each week. Latest quotations are as follows:—Australian mutton, fine 40s., good to fair 33s. 6d. to 37s., dull to dark 27s. 6d. to 31s., hard 38s.; beef, fine 37s., good to fair 32s. 6d. to 35s., dull to dark 27s. to 30s., and sweet 40s. per cwt.

Rabbit Skins.

This year's second series of public sales of Australasian rabbit skins was held last week, when 2904 bales of New Zealand and Australian were put up for sale. Both the home and export trades were well represented, and a good demand was experienced for cutters' requirements, though furriers were not so keenly interested. The quantity sold was 1274 bales, and business was done on the following basis:—New Zealand (565 bales sold), selected winter, dressing skins, 5s. to 8s. 6d. per lb.; good winter, light pelted 4s. to 5s. 6d., mixed pelted 2s. 6d. to 4s. 9d.; mixed season, 2s. 6d. to 4s. 6d.; common and low, 8d. to 2s. Australian and Tasmanian: Selected winter, dressing skins, 2s. 8d. to 4s. 10d. per lb.; good season, 2s. to 3s. 6d.; fair to good, 1s. 8d. to 2s. 6d.; medium, 1s. 4d. to 2s. 3d.; common and low, 3d. to 1s. 6d. per lb. The small supply of hare skins available sold at from 9d. to 12s. per dozen.

Hides.

A very depressed market has continued throughout the present month, and trading has been small, with values moving gradually in buyers' favour. The absence of Continental support continues, and dry, dry-salted, and salted hides have not been in request.

Sheepskins.

New Zealanders were not represented at the sales of Government and privately owned sheepskins early this month, when 7500 bales were put up for auction. About 70 per cent. of the offerings were sold, meeting moderate competition from the home trade buyers, the few Continental operators only buying on a small scale. Prices declined all round; combing Merinos and crossbreds fell away from 10 to 15 per cent., and other descriptions from 7½ to 10 per cent., when values are compared with those ruling at the January auctions. Merinos, three-quarter to full woolled, may be quoted from 5d. to 10d. per lb.; quarter to half-woolled, 3d. to 6½d.; crossbred, three-quarter to full-woolled, fine, 4½d. to 9½d.; ditto, coarse, 3½d. to 5d.; quarter to half-woolled, fine, 4d. to 6½d.; ditto, medium and coarse, 2½d. to 3½d.; Merino, short and shorn, ½d. to 3d.; crossbred, short and shorn, 1d. to 3d.; crossbred lambs, 3½d. to 6d.

Cattle Feeding Experiments in South Africa.

A series of experiments in cattle feeding recently carried out by the South African Department of Agriculture at the Potchefstroom and Cedara Agricultural Schools, gives some interesting results. Five crossbred oxen of four different breeds—Aberdeen-Angus, Hereford, Friesland, and South Devon—were selected for the purpose of the trials. The Aberdeen-Angus group of five included three first crosses from common stock and two higher grade animals, the Herefords being all high grades, the South Devons three high grades and two crosses from common stock, and the Frieslands four high grades and one Friesland-Afrikaner cross. All the animals used were purchased off the veldt shortly before the trials began, but the South Devon crosses were in rather better flesh than the others, which were in fair store condition. The oxen were given the run of a field of maize stalks for thirty days, and at the conclusion of that period the following results were obtained:—

	Total Gain per Ox.	Daily Gain.	Cost per lb. of Gain.
	lbs.	lbs.	
Aberdeen-Angus group	57	1.9	1.05d.
Hereford group	54	1.8	1.11d.
Friesland group	37	1.23	1.62d.
South Devon group	48	1.6	1.25d.

Then there followed a stall-feeding period of ninety-seven days, which gave the following results:—

	Average Gain in 97 Days.	Average Daily Gain.
	lbs.	lbs.
Aberdeen-Angus	236	2.4
Hereford	224	2.3
Friesland	228	2.3
South Devon	193	2

It will be noticed that the Aberdeen-Angus group did best in both the open and stall feeding tests. Herefords come next in the average, although the Frieslands, which did not do particularly well in the open, made slightly better gains under stall-feeding conditions.



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VALLO POWDER SHEEP DIP

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When Conditions are Severe

Essex Shows Marked Superiority.



It is a remarkable fact that ESSEX cars, in the recent Royal Automobile Club Reliability Contest, when road and weather conditions were extremely adverse, secured a most decisive victory in each class and displayed abnormal efficiency in every section of the contest, viz., Reliability, Hill-climbing and Petrol Consumption.

RESULTS.

Best performance of the day, both classes, ESSEX, First and Second. Outright Winner, Private class, Mr. Wm. Stuart's ESSEX, First. Outright Winner, Open class, Mr. A. T. Selman's ESSEX, First. Hill Climb, Bulli Pass, Private class, ESSEX, First, HUDSON, Second and Third, ESSEX, Fastest time. Hill-climb Bulli Pass, Open class, ESSEX, Second and Third. Petrol Consumption, Private class, ESSEX, First and Third. Petrol Consumption, Open class, ESSEX, First and Third. In these events the winning ESSEX cars, owned by Mr. Wm. Stuart and Mr. A. T. Selman, did 35.2 and 35.9 miles per gallon, respectively.

All ESSEX and HUDSON Cars secured full points for RELIABILITY.

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STUD STOCK SUPPLEMENT.



NOTICE TO STUD STOCK ADVERTISERS

As it is our rule to publish "THE PASTORAL REVIEW" on the 16th of the month, it is necessary that all alterations for the Stud Stock Advertisements must be in the printers' hands not later than the 6th of each month.

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WARRAH MERINOS

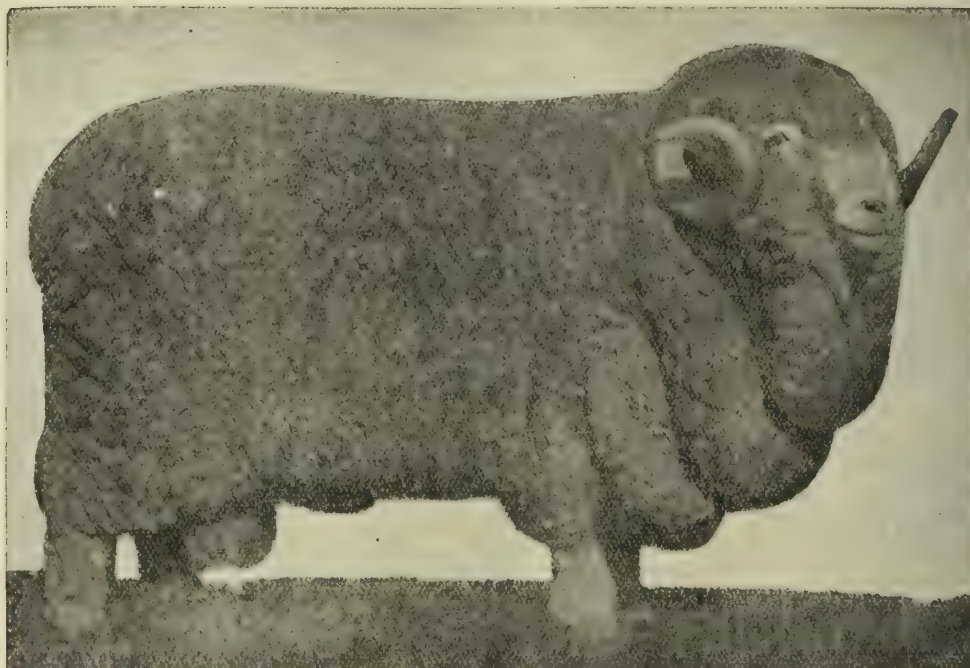
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The A.A. Co.

The Warrah Sheep are plain bodied, large framed and carry heavy fleeces.

For particulars apply THE MANAGER, WARRAH STATION, Willow Tree, N.S.W.

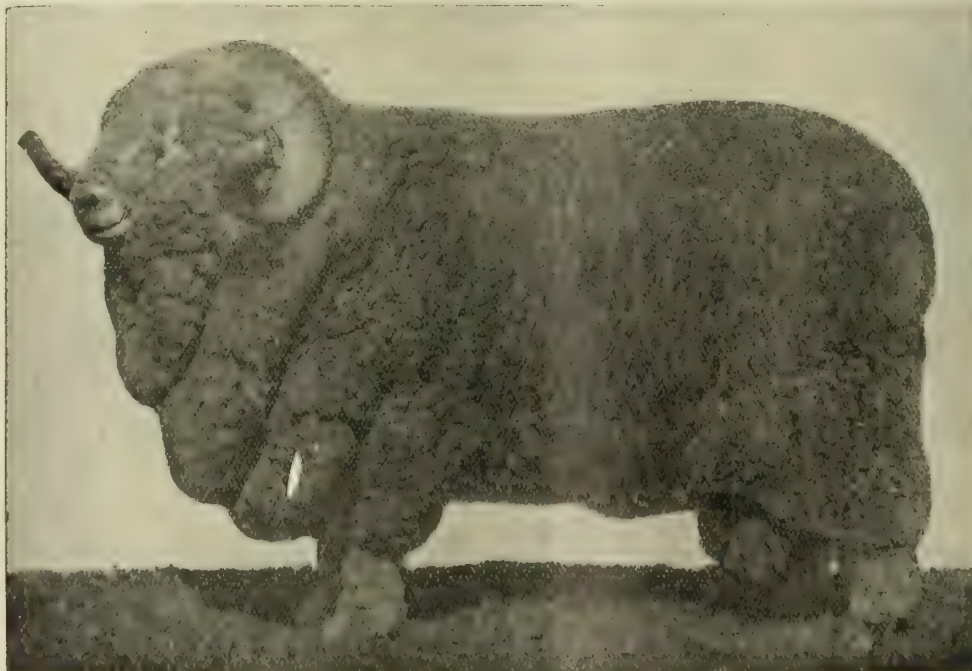
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These big framed, plain bodied, vigorous constitutioned sheep are grazed on natural grasses only, in a 12½ inch rainfall, and have proved themselves under both adverse and favourable conditions in all parts of the Commonwealth and in South Africa.



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Sires Used
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up to
37 lbs.



Stud Ewes
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have cut over
25 lbs.



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Flock Rams, 4 & 6 guineas. Selected Flock, 10 guineas. Stud Rams, 25 to 75 guineas. Special Studs from 100 guineas upwards.

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Collinsville Stud



"Dinkum," Aged 2 years and 2 months. Grand Champion Strong Wool Merino Ram (Unhoused) Sheepbreeders' Show, Sydney, July 1920.



"Broad Charles," Grand Champion Merino Ram (Unhoused) at N.S.W. Sheepbreeders' Show, Sydney, July 1919.



3 Champion Ewes. 1½ years (unhoused) Sheepbreeders' Show, Sydney, 1920.
Left to right—Reserve Champion, Grand Champion, Champion Strong Wool



Grand Champion Merino Ewe (Unhoused) at N.S.W. Sheepbreeders' Show, Sydney, July 1919.



Grand Champion Merino Ewe, 1½ years (Unhoused) Sheepbreeders' Show, Sydney, July 1920

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SOUTH AUSTRALIA

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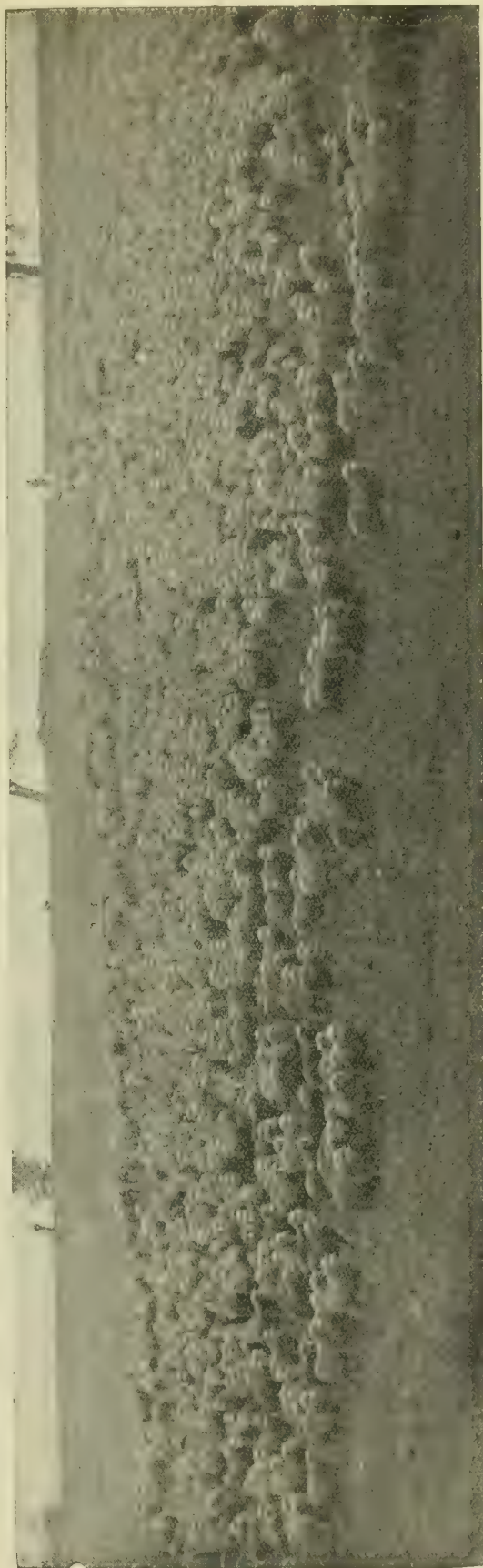
Rosebank secured Champion for Ewe at the Adelaide Royal Show three years in succession, 1910 to 1912. Awarded to different sheep by three different judges. Also secured the whole of the First Prizes offered by the Society for Ewes in 1912.



1½ Year-Old Ewes

Cut 22½, 21, 20, 18½ lbs. of Wool, 1917.

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6,700 Hoggets travelling to shearing shed, 1917. Averaged 11 lbs. 5 ozs. under 12 months' growth.

G. R. & A. MELROSE, "Rosebank," Mount Pleasant, S. Aust.

MOUNT CRAWFORD MURRAY MERINO STUD



CHAMPION RAM LION II.

Grazed at large on Naturalised Grasses only and not Lucerne
Bred by and the property of ALICK J. MURRAY, Mount Crawford, South Australia.

— THE MURRAY MERINO FLOCK —
was founded by the late JOHN MURRAY in 1843.

MURRAY Merinos have been INBRED for seventy-one years, and are famous throughout Australia, New Zealand, and South Africa for their robust constitution, large symmetrical frames, and heavy fleeces of profitable wool.

FULL PARTICULARS CAN BE OBTAINED FROM—
ALICK J. MURRAY, Mt. Crawford, South Australia.

THE KOONOONA STUD

Large framed,
bold woolled,
grass fed, pure
Australian
Merinos.
Founded in
1863.
Quotations
given for stud,
selected and
flock rams

Apply :—
Koonoona
Proprietors,
Cowra
Chambers,
Adelaide;
or
W. G. HAWKES
Manager,
Koonoona,
Burra, S.A.



Special Stud Ram, "LORD KITCHENER," 3½ Years Old, by "Rajah." Cut 33 lbs. Wool.

THE KOONOONA STUD.
Burra, South Australia.

Rhine Park —and— Cappeedee

MURRAY MERINO STUDS.

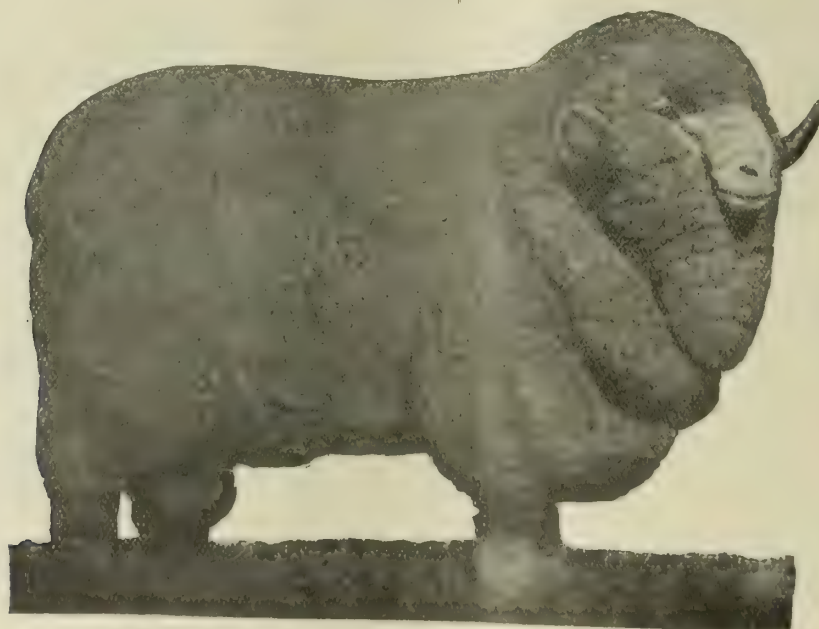


RHINE PARK RAM.

Champion at Adelaide, 1913. 3 years old. Cut fleece 29½ lbs.

THE MURRAY MERINO FLOCK was founded by the late **JOHN MURRAY** in 1843.

The **MURRAY MERINOS** have been **INBRED** for seventy-one years, and are famous throughout Australia, New Zealand, and South Africa for their robust constitution, large symmetrical frames, and heavy fleeces of profitable wool. These Sheep are grazed at large on naturalised grasses only.



2 YEAR OLD CAPPEEDEE STUD RAM, HAIG.

For full particulars apply

MURRAY BROS., Rhine Park, Eden Valley, South Australia
and
WALTER S. MURRAY, Cappeedee, Hallett, South Australia

MUMBLEBONE STUD

Established

1879.

[5]

Bred on Western
(N.S.W.) Salt
Bush Country.
Noted for their
robust constitution,
large frames, and
splendid fleeces of
long, strong staple.



Special Stud Ram No. 319.

For particulars sale rams apply—

KATER BROTHERS, Mumblebone, Warren, N.S.W.

H. E. KATER & SON'S EGELABRA STUD, WARREN, N.S.W.



EGELABRA TWO-TOOTH STUD RAM.

The Egelabra Stud is a portion of the Mumblebone Stud, and was acquired by the present owners by the subdivision of Mumblebone in 1906. The stud was founded in 1879 by H. E. and E. H. Kater, who purchased rams and ewes from the late Hon. John Smith, of Gamboola, Molong. Since that date no fresh blood has been introduced into the flock. Mr. Smith was a noted breeder. His flock was founded about 1840 from Marsden's flock of Spanish Merinos and Negrettis, specially imported from Spain. Thus it is claimed that the Egelabra Stud has maintained for 78 years that purity of blood which is so important.

The sheep are noted for large frames, plain bodies, splendid fleeces, long staple, and magnificent constitutions. At a recent shearing the Egelabra sheep, consisting mainly of breeding ewes, cut 14 lbs. 4 ozs. of wool.

For particulars of Sale Rams apply to—

The Manager, Egelabra, Sandy Creek, Warren, N.S.W.

DALKEITH MERINOS

PLAIN BODIED

PURELY GRASS-FED

BOONOK BLOOD

[11]

The stud is under the personal supervision of Mr. F. D. McMaster, and was classed by the late Mr. J. C. Darke. The work in the future will be done by Mr. W. J. McCarthy.

Sir Alick, a son of Australia Day, took first prize for ram under 2 years at the Sydney Show, 1919. In 1920 he took Reserve Grand Champion and first prize and was sold to the Welbondongah Pastoral Company for 400 guineas.



SIR ALICK

STUD AND FLOCK RAMS FOR SALE.

Trucking Stations—Mudgee, Merriwa, or Craboon. Rams will be delivered on trucks to suit buyer's convenience.

F. D. McMASTER, DALKEITH, CASSILIS, N.S.W.

Amongst the sires used are Australia Day, Comedy King, General Grant, Young Comedy King, Young Australia, and numerous other high-class Boonoke Stud Rams. Additions made to the stud in 1918 were as follows:—10 Boonoke blood special stud ewes at 110 guineas, which took second prize Sydney Show, 1918, and 1 ditto Grand Champion at same Show at 150 guineas, all purchased from Goldsbrough, Mort & Co. Ltd., Canonbar Station; 10 special stud pure Boonoke ewes at 100 guineas each, from F. S. Falkner & Sons Ltd.

CARWELL

MERINOS

- ☞ Pure Murgha
(Wanganella) blood.
- ☞ Large frames, plain bodies,
long staple wool, good
colour, heavy fleeces.
Entirely grass fed and
sound of constitution.
- ☞ The sheep are specially
suitable for South African
conditions.

Stud & flock rams
for sale

SHORTHORNS

- ☞ Founded on Durham Court
blood. The best strains
from Victorian studs since
used.
- ☞ Leading sires now in use:—
Collendina Duke of
Derrimut 11th,
Chocolyn Duke of
Derrimut 61st.
- ☞ Combine constitution with
quality, good doers under
any condition.

Stud & herd bulls
for sale

APPLY

The Manager

CARWELL——GULARGAMBONE——N.S.W.

Telegraphic Address: "Carwell, Quambone, N.S.W."

OR

CARWELL STUDS LIMITED

430 Little Collins Street——Melbourne——Vic.

The Wanganella Stud

Stud and Flock Rams for Sale.



Stud and Flock Rams for Sale.

SPECIAL STUD RAM No. 502, 4 years old.

Sold by Austin Wanganella Co. Ltd., with 20 Special Stud Ewes, to A. M. Conroy, Philipstown, Cape Province, South Africa, for 6000 guineas.

For particulars apply :—AUSTIN WANGANELLA CO. LTD., Wanganella, Deniliquin, N.S.W.

VICTORIA DOWNS STUD

MORVEN ————— QUEENSLAND.

A
Queensland
Stud
of
pure Peppin
Wanganella
Blood.



Stud Park No. 10. Purchased by Lord Bros. from Thomas Millear for 2500 gns.

The VICTORIA DOWNS MERINOS are pure Wanganella blood, being founded on rams purchased from Deniliquin Stud Park and Wanganella Estate, New South Wales, at high prices; the ewes were bought from the former property. Bred on the downs of Western Queensland, the **Victoria Downs Sheep** are noted for their exceptional constitutions and grow a fleece of very dense medium combing wool, of good length and abundant character.

Cattle—both sires and dams—chiefly Derrimuts, together with a number of imported females 41 pedigree females costing from 100 to 515 gns, and averaging 188 gns., also 34 other pedigree cows and heifers averaging 60 gns. All Herd Book registered.



[Clifton Cherry Colonel, 1 year 7 months. Purchased from A. J. Simpson for 1000 gns.]

Foundation of both sheep and cattle studs made by the purchase of the very best animals, male and female, obtainable.

For full particulars, apply to—

LORD BROS., Victoria Downs, Morven, Q'land.

Flock and Stud Rams for Sale.

Flock, 4, 6 and 8 gns.
Selected, 10 and 12 gns.
Studs from 15 gns.
upwards.

Stud and Herd Bulls for Sale.

Young Herd Bulls from
20 gns. upwards.

Young Pedigree Bulls
from 40 gns. upwards.

Deniliquin Stud Park North Stud

(PURE WANGANELLA BLOOD.)

The Property of THOMAS MILLEAR.



"DONALD DINNIE"

Bred and Sold by THOMAS MILLEAR, Deniliquin Stud Park Stud, N.S.W., through Messrs. Herbert Power and Son, to the proprietors of the CANOWIE ESTATE, South Australia. Price, 1200 Guineas.

The above photo was taken at Canowie in 1908.

Since 1906 "Donald Dinnie" has sired 1056 lambs, and an immense sum has been received by the owners for his surplus progeny. His fleece has averaged 32 lbs. for the past 10 years, and now (1915), at 12 years old, he has cut 31½ lbs. of bright, lustrous wool.

Among the rams sold have been—"Donald Dinnie" (photo above), in 1906, for 1200 gns.; "Sir William," in 1909, for 1350 gns.; "Stud Park No. 10," in 1918, for 2500 gns., this latter being a world's record for a 6-year-old pure Peppin Rambouillet.

This Stud was formed in 1892 by the father of the present owner (then managing partner in Wanganella), and the classing since 1898 has been done by the owner in conjunction with his Manager, who is now in his 24th year of service.

In June, 1919, Mr. Millear transferred his Deniliquin Stud Park property, with about 4000 stud sheep, being absolutely fair samples in each grade of the 20,000 owned by him, to his son, Thomas Millear, jun., retaining for himself the property Stud Park North, Jerilderie, N.S.W., which has been worked for many years past in conjunction with Stud Park, Deniliquin. During his son's absence from Australia Mr. Millear will carry on this latter property in the former's interests.

N.B.—The sale of Wanganella Estate by the Exors. of late Thomas Millear (of which Mr. Millear was a Trustee) does not affect the Stud Park North business, as no sheep from Stud Park North were parted with, nor did Mr. Millear acquire any from Wanganella Estate for Stud Park North, excepting prior to the sale of the Estate.

INQUIRIES FOR STOCK SHOULD BE ADDRESSED TO

THOMAS MILLEAR, Edgarley, Willaura, Victoria,

or to the MANAGER, STUD PARK NORTH, JERILDERIE, N.S.W.

WANGANELLA ESTATE STUD

Property of F. S. FALKINER & SONS Ltd.



No. 955.—OPTIMIST. 3 years old.

Sold to Dr. G. E. Goddard for 1750 guineas.

Property of F. S. Falkiner & Sons Ltd., Wanganella Estate, Conargo, N.S.W.

Large frames, plain bodies, robust wool of pronounced character, good length and colour. Numerous letters of appreciation from buyers throughout the Commonwealth and South Africa.

THIS STUD was formed by Messrs. Peppin & Sons in 1861, and purchased with the Station by Messrs. Austin & Millear in 1878. This partnership terminated in 1894—Mr. Millear then taking over his half of the property and stock, which he named **Wanganella Estate**, and conducted till his death in 1895. The Trustees carried on the business until August, 1910, when they sold the property, the whole of the pure bred **WANGANELLA ESTATE Stud Flock**, and the **GOODWILL** of the business to **F. S. FALKINER & SONS LTD.**

FLOCK and STUD RAMS for SALE, for particulars apply—

F.S.FALKINER & SONS LTD., Wanganella Estate, CONARGO, N.S.W.

THE WILLANDRA STUD

Property of The Willandra Pastoral Co. Ltd.

Pure Wanganella Blood.

The Willandra sheep are bred in a 14" rainfall and are entirely grass fed, possessing strong constitutions, plain bodies, with good heads and necks (which is a distinct advantage where the fly is troublesome), and long

dense fleeces of robust wool. The Willandra sheep produce a fine type of wethers, with exceptionally large frames, plain bodies, well proportioned, and most suitable carcasses for export, while at shearing yield heavy fleeces of attractive wool.



WILLANDRA STUD RAM.

Stud Rams cut up to 35 lbs. Stud Ewes cut up to 25 lbs. Flock and Stud Rams for Sale.

For particulars apply to—The Manager, Willandra Station, Booligal.

Telegrams: Hillston. Cable Address: Acumen Sydney. A.B.C. Code, 5th Edition.

HADDON RIG MERINO STUD

Pure Wanganella Rambouillet



Haddon Rig 2-Year-old Ram, "Royal Dandie," sold to A. G. Michaelan for South Africa for 1500 guineas.

A few rams of "record" quality at "reasonable" prices available each year.

FRANC B. S. FALKINER, Owner, Late Managing Director of F. S. Falkiner & Sons Ltd., 30 years Riverina experience in breeding and active station management.

Inquiries to **HADDON RIG, WARREN, NEW SOUTH WALES.**

THE BUNDEMAR STUD

Inquiries
for
Stud
and
Flock
Rams
to
The Manager
BUNDEMAR
TRANGIE,
N.S.W.



**BONNIE
CHARLIE**
Sire:
Prince
Charlie
Grand Sire
Lord Charles
G.B Sire:
Sir Charles

BONNIE CHARLIE.

Bred by Estate late F. E. Body, Bundemar, Trangie, N.S.W. Born Nov. 1st, 1918.
Sold June 16th, 1920, to Messrs. Vermaak Bros., Stockdale, Stormberg Junction, C.P. South Africa, for Three Thousand Six Hundred Guineaes.

Also bred in the Bundemar Stud	{	Prince Charlie	...	...	Sold to M. Collins for 3000 guineas in 1918
		Lord Charles	...	...	H. Collins & Co. for 2000 guineas in 1915
		Sir Charles	...	...	D. & W. Gibb for £1000 in 1910
		2-tooth Ewe, No. C 692	...	...	C. Meyer, Edenburgh, S. Af., for £250 in 1920

Zara Merino Stud



Zara Stud Ram

**Stud
and
Flock
Rams
for
Sale**



Group of Zara Stud Rams

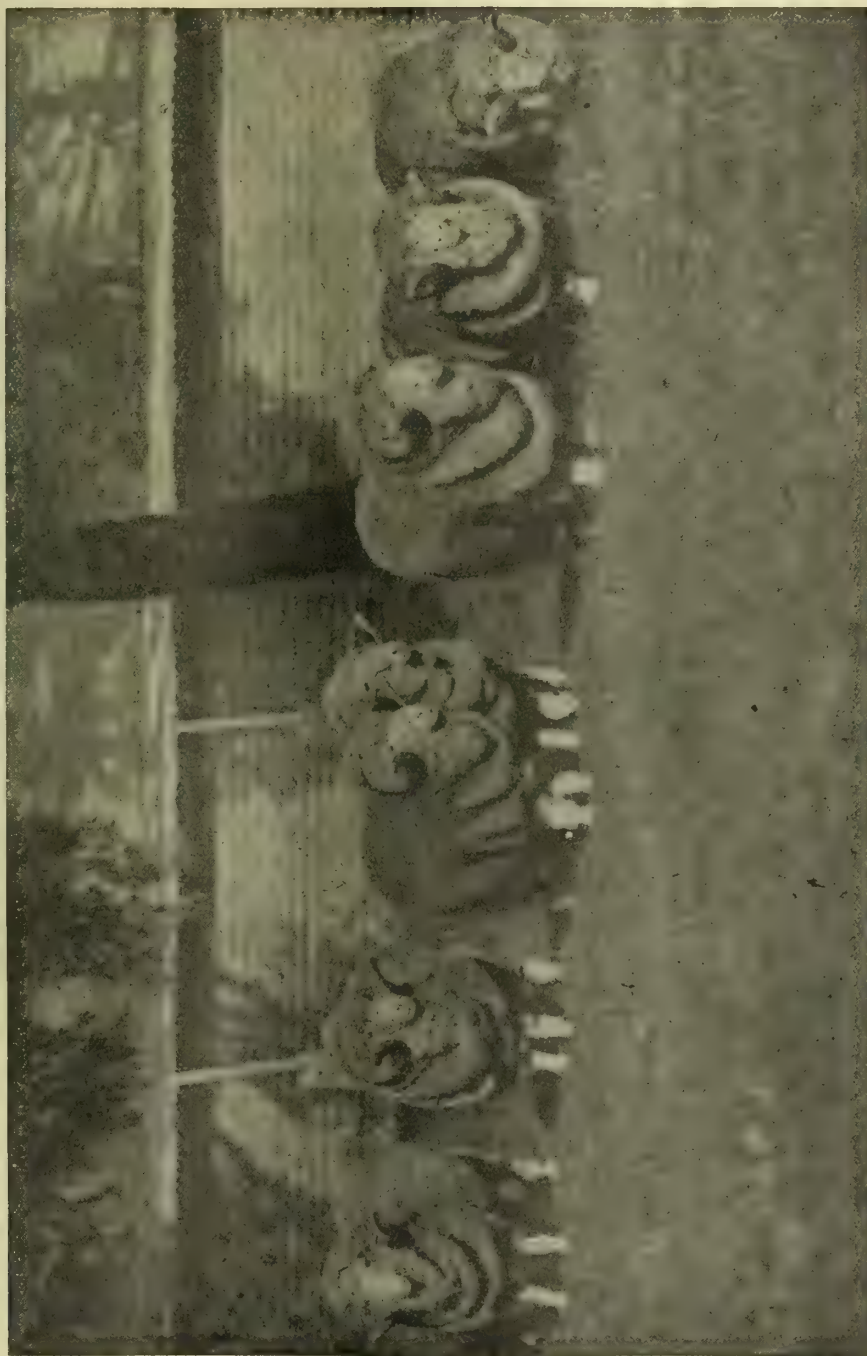
Estate late

WILLIAM OFFICER—ZARA—WANGANELLA

New South Wales

The UARDRY Stud.

PURE PEPPIN BLOOD.



Group of Seven Rams sold at Auction, Sydney, July 1918, Averaged £319 10/-

Stud and Flock Rams for Sale.

Enquiries should be addressed to:—

Charles Mills (Uardry) Limited, UARDRY, Hay, N.S.W.

Telegrams to "MILLS, Uardry, Carrathool."

Boonoke Stud Merino Sheep.

PURE PEPPIN BLOOD.



A leading Boonoke Sire. Photo taken at 6 years old.

Bred by F. S. FALKINER & SONS LTD., Boonoke, Conargo, N.S.W.

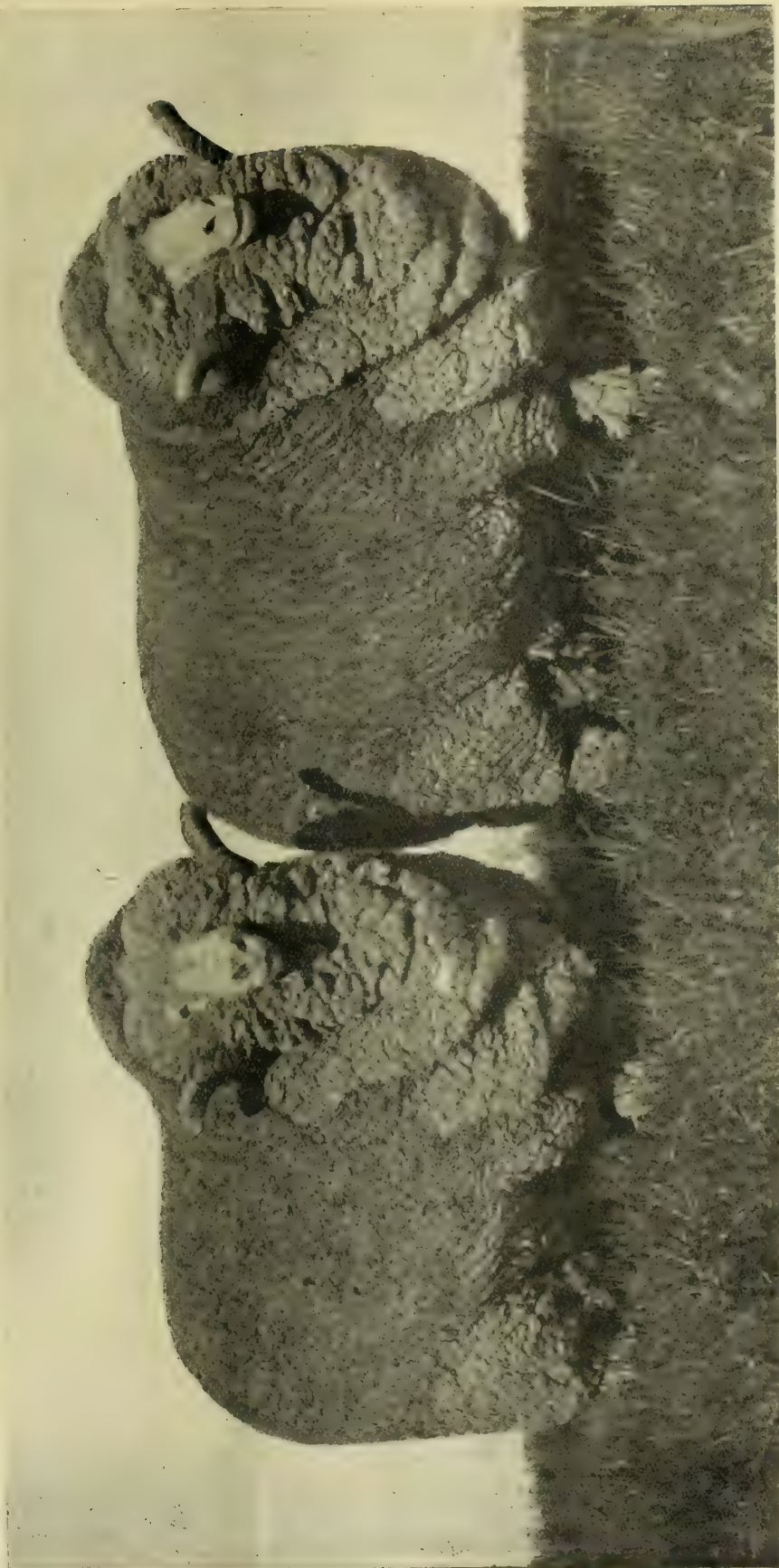
Inquiries for Stock should be addressed to—

F. S. FALKINER & SONS Ltd., Boonoke, Conargo, N.S.W.

or Boonoke North, Wildglewa Siding, N.S.W.

BURNIMA MERINO FLOCK

A combination of the famous Murray and Koonoona blood of South Australia. Large-framed, plain-bodied sheep, cutting heavy fleeces of high-class wool. Pure Australian Merinos bred on sound lines. These sheep have given satisfaction wherever used.



4-tooth Stud Rams.—Two of the Leading Sires.

STUD AND FLOCK RAMS FOR SALE.

Apply to the **MANAGER, BURNIMA, BIBBENLUKE, NEW SOUTH WALES.**

EAST BUNGAREE MERINOS

South Australia.



2-year-old Stud Ram 250.

Grazed on natural grasses only.

PURE bred by E. W. Hawker since 1906 from his share of the original Bungaree Stud and Flock, the oldest combing Merino flock in South Australia.

The EAST BUNGAREE sheep are large framed, plain bodied, with splendid constitutions, and are well covered with long robust wool showing plenty of character.

In October 1909 the EAST BUNGAREE wool topped the Adelaide market, and has consistently brought high prices ever since.

In 1917, 18 bales of A A E were appraised at 25½d.; nine bales of B B E at 24½d.; 14 bales of A H A E at 23½d.

For particulars of Stud and Flock Rams and Ewes for sale apply to—

EDWARD W. HAWKER, East Bungaree, Clare, South Australia
Or to the Manager.

Telegrams—East Bungaree, Clare S.A.

Telephone—East Bungaree, Clare, S.A.

NORTH BUNGAREE MERINOS

"NORTH BUNGAREE" is the Northern portion of the original "Bungaree" run, and was taken over by Mr. M. S. Hawker with his share of the Bungaree Stud and general Flock Merinos in 1906.



4-year-old Special Stud Ram, No. 1. The property of M. S. Hawker, North Bungaree.

THE "NORTH BUNGAREE" MERINOS retain all the characteristics of the original "Bungaree" Flock (founded by the late Hon. G. C. Hawker in 1841), viz.: Size, Constitution, Length of Staple and Weight of Fleece.—1917 clip realised up to 25½d., one line of 60 bales making 23½d.

Inquiries for Rams to be addressed to

The Manager, North Bungaree, Yacka, Sth. Aust.

Telegrams: North Bungaree, Clare, S.A.

Telephone: Clare, S.A.

THE ANAMA STUD

**Bred by WALTER HAWKER, at ANAMA
(Central Bungaree), South Australia.**



**Special Stud Ram, "Progress" (4 years) by "Perfection 1—Miss Togo.
Bred by Walter Hawker.**

The Anama Merino Flock was established in 1841 by the late G. C. Hawker at Bungaree, and is noted for producing sheep of great constitution and size, being plain-bodied with very valuable fleeces of long combing wool of robust type.

Orders for stud and flock rams booked through The Manager, ANAMA STATION, Clare, South Australia.

Telegrams and Telephone—Clare.

All rams and ewes classed by Mr. H. C. Pennefather.



Special Stud Ewe, "Lady Togo." Cut 20 lbs. 1 oz. wool; Height—Shoulder, 2 ft. 8 in. Rump, 2 ft. 9 in.; Girth, 5 ft. 9 in.; Length, 3 ft. 11 in. Bred by Walter Hawker

Bred by WALTER HAWKER, Anama, Clare, South Australia

THE BUNGAREE STUD

Stud
and
Flock
Rams
for
Sale



BUNGAREE SPECIAL STUD RAM, No. 32.

For particulars apply:—

H. C. & R. M. HAWKER,

Bungaree—Clare—South Australia

Stud
and
Flock
Rams
for
Sale

The Springfield Pure Merino Stud

Goulburn

New South Wales.

**Founded in 1838 by the late W. P. FAITHFULL
Bred since 1871 by A. LUCIAN FAITHFULL.**



ADMIRAL.

Bred by A. Lucian Faithfull. Weight of fleece,
29 lbs. 4 ozs. 12 months 3 days growth.
Length of Staple, 4½ inches.

For further particulars apply to—

A. LUCIAN FAITHFULL,
Springfield, GOULBURN, N.S.W.

TELEGRAPH AND TELEPHONE ON.

These sheep are noted for their very high cutting value per fleece. All for their hardy, strong constitutions, doing well in any climate, and growing to a great size.

The A. A. D. Pomeroy wool, bred by A. A. Dalglish from Springfield bred rams and out of ewes by Springfield bred rams for the last **ten** year **topped** the Sydney market for greasy wool. In 1917, **40** bales realised **29d.** and **44** bales, **29½d.**

This year (1918) same A. A. D. Pomeroy wool has realised **30d.** per lb.

This year (1919) wool the progeny of Springfield bred ram again **topped** Sydney market, viz. **Lerida 30½d.**



30 Special Stud Ewes, bred by A. Lucian Faithfull.
Typical style of Springfield Merinos.

Average weight of Fleeces, 12 months' growth, unhoused, 18 lbs. 4½ ozs

THE GUMS MERINOS

Large Frames—Strong Constitutions—Long Staple—Bold Fleeces



Special Stud Ram, 2½ Years Old.



Three 1½ Years Old Stud Ewes. Cut 18, 19 and 20 lbs. Wool respectively.

Founded on Murray, Koonoona and Canowie blood, the Stud is true to the pure South Australian type. Bred on saltbush country and without any pampering the sheep will stand up to the hardest conditions.

The Property of
THOMAS H. PEARSE & SONS,

The Gums—Florietown—S. Aust.

Phone—58 Kooringa

Apply—The Manager, The Gums.

Goolgumbla Stud Merinos

The property of
Mr. GEORGE STUART.

**Pure Peppin strain,
large frames,
strong constitu-
tion, long staple.**

All the ewes in the Goolgumbla
Stud are by pure Wanganella,
Haddon Rig, and Boonoke rams
from ewes of the same blood.

For particulars apply—

**The Manager
GOOLGUMBLA,
Jerilderie,
N.S.W.**



Goolgumbla Stud Ram.

COBRAN

PURE PEPPIN BLOOD.

DENILQUIN, NEW SOUTH WALES

"COBRAN" for the
last 30 years at least
has been the premier
wool clip of Riverina,
and has with very few
exceptions topped the
market during that
period.



COBRAN 4-tooth Ram. Length of staple, 5 inches.

For full particulars apply

**C. H. BESLEY, The Olderfleet, Melbourne, Vic., or
The Manager, COBRAN, Denilquin, N.S.W.**

The "COBRAN"
wool is noted for its
robustness, great length
of staple, excellence of
character and high
yield; the sheep are
big framed, plain
bodied, heavy cutters,
very even in type, and
have been bred on
these lines since its
inception.

WIRRA WIRRA STUD MERINOS

At MT. CRAWFORD, SOUTH AUSTRALIA.



Grazed at large on natural
grasses only.

Bred by and the Property
of MURRAY DAWSON,
Wirra Wirra, S.A.



WIRRA WIRRA, 5½ years old Stud Ram, No. 300.

MURRAY DAWSON, WIRRA WIRRA, Mt. CRAWFORD,
SOUTH AUSTRALIA.

MERRIBEE STUD FLOCK (Late Bull Plain)

MAINLY MURRAY Blood

Established 24 Years.



Extra Large Frames.

Heavy Fleeces of long,
strong, combing Wool.

All MERRIBEE grown sheep
averaged 13 lbs. 3 ozs. wool
with barely 12 months' growth
—Lambs averaging 5½ months
old cut 5 lbs. 2 ozs.

ORDERS BOOKED FOR RAMS.

Particulars on Application.

W. W. KILLEN
Merribee, Barellan, N.S.W.

Telegrams—
Barellan (thence Telephone).

CASSILIS MERINO STUD

The Property of A. BUSBY.



The sheep are large-framed, plain-bodied and carry fleeces of high quality, density and character.

These rams have been very successful in Central Queensland.

The flock has been classed for many years by the late J. C. Darke, and is now being classed by W. J. McCarthy.

Particulars on application from :—



**THE MANAGER, CASSILIS STATION, CASSILIS, N.S.W.
or DALGETY & CO. LTD., SYDNEY.**

BARRATTA MERINO STUD.

PURE PEPPIN BLOOD.

Property of the Australian, Mercantile, Land and Finance Co. Ltd.



BARRATTA-BRED EWE AND RAMS.

- (1) Champion Hand-fed or Grass-fed Strong Wool Ewe. (2) Reserve Champion Hand-fed or Grass-fed Strong Wool Ram.
(3) Champion Hand-fed or Grass-fed Strong Wool Ram.

AUSTRALIAN SHEEPBREEDERS' SHOW, 1918.

For particulars apply

**The Manager—Barratta, Deniliquin, N.S.W.,
or to**

**AUSTRALIAN, MERCANTILE, LAND & FINANCE CO. LTD.,
Sydney—Melbourne—Brisbane.**

This stud was commenced by the Company in the year 1893 on another property by the purchase of high-class stud ewes and rams from Messrs. Austin & Millear, Wanganella, and since then from time to time purchases have been made from Wanganella, Wanganella Estate Stud Park Deniliquin, Murgha and Haddon Rig.

**STUD and
FLOCK RAMS
FOR SALE.**

Mendip Hills Merinos and Halfbreds

FLOCK ESTABLISHED 50 YEARS.

The Mendip Merinos gained Champion Ram and Ewe at Christchurch Show in 1903-4-5-6, and again in 1915 and 1916. Mendip Halfbreds have won the "Liston" Cup Competition for Corriedales and Halfbreds, competing together three times since its inception in 1911.

**Stud
Rams
cut
up to
34 lbs.
Wool.**



**Stud
Ewes
cut
up to
23 lbs.
Wool.**

Part of a Mob of Stud Rams Exported to Argentina at an average of 70 gns.

For particulars apply—

NORMAN RUTHERFORD, Mendip Hills, or G. L. RUTHERFORD, "Connemara," Parnassus, N.Z.

Brucedale & Curranyalpa Merino Stud Flocks

Brucedale Stud, established 1850. Now consists of Peppin blood ewes bred at Curranyalpa, rams in use from Bundemar, Uardry, Boonoke, and Urangeline.

For particulars
apply to—

**H. C. SUTTOR,
Brucedale, Peel,
New South Wales.**



Curranyalpa Stud. Peppin blood from Boonoke, Bundemar, and Wanganelle bred rams and ewes. Rams now in use from Lucernedale, Haddon Rig, and Uardry. Big, strong, hardy, plain body sheep, bred on the dry salt bush plains of the Darling for years.

For particulars apply to
**CLAUD H. SUTTOR,
"Mia Mia,"
Purlewaugh, via
Coonabarabran.**

Special Stud Ram "DANDY," 4 years old.

Bred at Curranyalpa. Cut 31 lbs. wool, hand shorn, September, 1920, 12 months' growth.

THE

South Wangamong Stud Merino Flock

Property of CHAS. D. SANGER



4-tooth Selected Flock Sale Rams.

Stud Flock founded in 1853. In 1863 ten Wanganella Stud Rams (the pick of their celebrated imported pure Rambouillet sire, Emperor's Get) were successfully introduced. Since then no other strain has been introduced into the Stud.

Average of all grown sheep (75 per cent. lambing ewes), 12 lbs. 13 ozs.

The 1915 Clip sold in Melbourne to 18½d., and Pieces to 15½d. in grease.

" 1916	"	"	"	22½d.,	"	"	19½d.	"	"
" 1917	"	"	"	25½d.,	"	"	21½d.	"	"

For particulars of Flock and Stud Rams apply to—

CHAS. D. SANGER, South Wangamong, Corowa, New South Wales.

"LAMARA" STUD MERINOS



STUD RAM No. 28 (2½ years.) Sire, "Lord Charles."

BREEDING.

This Stud is a portion of the "Collinsville" Stud Flock, which has recently been subdivided.



"SILVER CHARLES."
Sire "Lord Charles" (cost 2000 guineas.)

For further particulars apply to—

H. MELVIN COLLINS

"Lamara," Booborowie, Burra, Sth. Aust.

Wires: "Lamara," Booborowie, S.A.

Telephone: No. 2, Booborowie.

MULWALA MERINO STUD

Founded 1863.



Type of selected sale rams bred at Mulwala.

The flock has always been bred on the same lines, under management of James Sloane since 1877.

JAMES SLOANE & SON,
Mulwala Station, Mulwala; or Wood Park, Jerilderie, N.S.W.

“BURRAWANG” MERINOS

Estate late C. Hedley Edols.

The Stud is classed by Mr. W. O'Brien of Mumblebone.



Since 1880 the “BURRAWANG” flock has been maintained solely from Wanganella Blood. During 1918 a high-class Murgha Ram was purchased at a cost of 1000 guineas.

For STUD or FLOCK RAMS

Apply to—The Manager, “Burrawang,” Yarrabandai, N.S.W.

or to—The Executors of the late C. H. Edols,

c/o Perpetual Trustee Co. (Limited),

33-39 Hunter Street, Sydney.

THE GUNDARY PLAINS MERINO STUD



STUD RAM JUPITER.

The Gundry Plains Stud Ewes were originally purchased from the stud flocks of Messrs. Litchfield, Cooma, and A. Lucian Faithfull of Goulburn. Stud Rams were purchased from the above flocks, and from Boonoke, to mate with the above ewes. The aim of the flock has been to produce a robust, plain-bodied, strong-wool sheep, and they are noted for their heavy fleeces of strong combing wool.

For further particulars apply to—

A. R. MAPLE-BROWN,
Gundry Plains, Goulburn, N.S.W.

NALPA STUD MERINOS

E. C. & J. L. STIRLING, South Australia.

The flock is one of the oldest established in the State and a noted prizetaker in both **SHEEP and WOOL.**

NALPA secured all champion prizes for Merino wool as allotted Royal Show, Adelaide, 1914 to 1918. Also first and special prizes for two best rams' fleece, Melbourne Royal, 1919.

STUD AND FLOCK RAMS FOR SALE.

Apply to **Manager, Nalpa, Langhorne's Creek, South Australia**

Telegrams: Fullarton, Wellington, E.



No. 4-1—Double Reserved Champion, Australian Sheep Breeders' Association, Melbourne, 1917. Sold to Geo Seiberhagen, South Africa, for 1000 guineas. Cut fleece 34 lbs.

WYAMBEH CORRIEDALE STUD



WYAMBEH Two-year-old Stud Ram.

The property of

John A. Sloane, Wyambeh, Mulwala, N.S.W., and
John A. Sloane & Co. Ltd., Neyliona, Carrathool, N.S.W.

Flock Founded 1882 by H. J. Corbett. Lincoln Merino Blood only. When exhibited have always proved successful, winning Champion Prizes 1918, 1919, 1920 at the Australian Sheepbreeders' Association Show. Registered Australian Corriedale Sheepbreeders' Association.

Particulars of Rams for Sale apply—

JOHN A. SLOANE, Wyambeh, Mulwala, N.S.W.

The Eurella and Wairoa Corriedales



The flocks are direct descendants from 800 ewes purchased during 1904-5, and a subsequent purchase from the N.Z. and A. Land Co.'s Corriedales (No. 1 N.Z. Flock Book), established in 1874 and thus the oldest in existence.

Origin Lincoln-Merino and no other blood ever introduced.

All rams used in these flocks have been from the parent flock or bred by owners.

Registered in Australian Corriedale Sheep Breeders' Association
Flocks Nos. 15 & 16.

Following previous successes, at the 1919 Sydney Sheep Show these flocks practically "swept the pool," taking all First, Reserve and Champion Prizes.

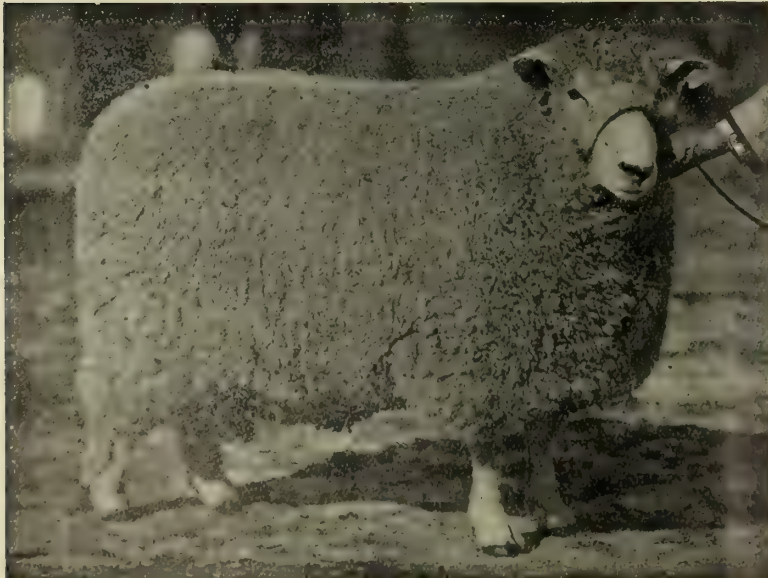
Stud and Flock Rams For Sale. Guaranteed to breed true to type.

For particulars apply to— **D. MACFARLANE, Eurella Estate, Rylstone, N.S.W., or to MACFARLANE BROS., Wairoa Estate, Narrabri, N.S.W.**

WILLEROO ROMNEY MARSH STUD

REGISTERED IN THE AUSTRALIAN LONGWOOL SHEEPBREEDERS' ASSOCIATION FLOCK BOOK (FLOCK NO. 29).

The property of PAT. OSBORNE, Willeroo, Tarago, N.S.W.



Willeroo Ram No. 46 of 1915.

1st Prize and Reserve Champion at the Royal Show, 1917, 1st Prize at the N.S.W. Sheepbreeders' Show, 1917, and Grand Champion at the Melbourne Royal Show, 1918.

The Willeroo Rams also made the highest average price at the Sydney Stud Sheep Sales—an average of £56 17s., the highest average for Longwool Sheep in Australia.

THIS Flock was founded in 1910, and now comprises 1100 Stud Ewes. The Ewes purchased for this flock are from the registered flocks of Mr. J. E. Quested, Kent, England; Mr. W. F. Jacob, New Zealand; Mr. G. F. Doyle, Molong, N.S.W., and from the late Mr. James Gibbs' flock, which was all pure Elham blood.

Rams purchased for this Flock from England—in 1915 three from Mr. J. E. Quested, in 1916 two from Mr. Quested, one being the Champion at the Ashford Show and a First Prize Ram at the Royal Show, England; and one in 1916 from L. H. and G. W. Finn—this ram won the Championship for Wool at the Ashford Ram Show in 1916.

Prizes won by this Stud in 1916, 1917, 1918 and 1919 at the Sydney and Melbourne Shows:—7 Grand Championships; 3 Reserve Championships; 38 First Prizes; 26 Second Prizes; 17 Third Prizes; and 3 First Prizes for Wool.

The Willeroo **Romney Marsh Cross** have also won First Prizes four years following, competing against all breeds at the Sydney Sheep Shows, as follows:—

First Prize for Pen of ten Fat Wethers for Export
First Prize for Pen of ten Fat Wethers, judged on Commercial Value.

First Prize for Pen of ten Fat Wether Lambs, judged on Commercial Value.

Stud and Flock Rams always on Sale. Full Pedigrees of all Stud Sheep are Kept.

FOR FURTHER PARTICULARS APPLY TO—

D. A. WHITE, Stud Manager, Willeroo, Tarago, N.S.W.

New Zealand Romney Marsh Sheep Breeders' Association

(Incorporated)

THE attention of Flock Owners in Australia is drawn to the merits of the New Zealand Romney Sheep. The stud flocks of the Dominion can supply your demands for rams and breeding ewes.

Our Romneys hold the World's Championship.

Correspond with the Association for full particulars.

The Secretary, P.O. Box 40, Feilding, New Zealand.

ROMNEY MARSH SHEEP.

The Registered Romney Marsh Flock at the Home of the Breed.

NO. 18

Owned by ARTHUR FINN, Westbroke, Lydd, Romney Marsh, England

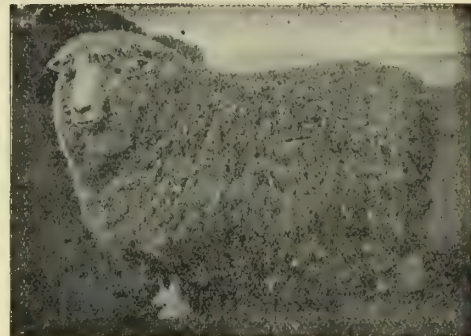
This flock, established for more than 140 years, maintains the highest reputation. Honours gained in 1912: 1st for wool at the R.A.S.E. Show. In the Ewe Flock Competition of the Romney Marsh Sheepbreeders' Association, 1375 Westbroke Ewes obtained the 1st Prize in the large Flock Class, and Reserve for the Champion Cup for the Best Flock.

Inspection invited of 2000 registered sheep grazing on the Marsh under natural conditions.

Telegrams and Cables: ARTHUR FINN, LYDD.

A.B.C. Code 5th Edition used.

Telephone No. 2, Lydd. Lydd is 70 miles from London. S.E. Railway.



Champion Romney Ram at Panama Exhibition, 1915, bred by Mr. Alfred Matthews in New Zealand, sired by a Westbroke Ram out of a Westbroke Ewe, both parents imported from the flock of Mr. Arthur Finn, Westbroke, Lydd.

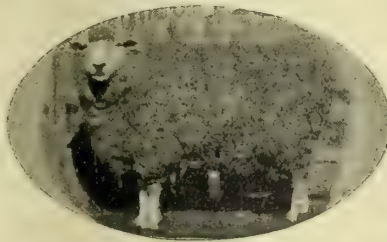
Cardington Stud of Romney Marsh Sheep

Some Photos of the leading sires from 1903 to 1920, showing a continuity in type.



NUGGET I.

Sire Elham Jumbo (imp.). Reg. 13361, Vol. X., K. or R.M.F.B., dam Elham ewe (imp.), No. 81 of 1903. Reg. 194, Vol. XI. Leading sire 1909, 10, 11 and 12.



ACTIVE I.

Reg. 21. Vol. 1. Leading sire 1903, 4 and 5



ELHAM JUMBO (imp.)

Reg. 13361. Vol. X. K. or R.M.F.B. Leading sire 1906, 7, 8, 9 and 10.



ELHAM STANDARD I.

Dalry 20 of 1915. Sire Elham 98 of 1912 (imp.), dam Dalry ewe 16 of 1913, by Elham 104 of 1910 (imp.). Winner Sires Memorial Cup, Melbourne Royal, 1919. Leading sire 1918.



ELHAM STAMP I.

Dalry 68 of 1916. Sire by Elham 104 of 1910 (imp.), dam Dalry ewe 16 of 1912 by Elham 104 of 1910 (imp.). One of the leading sires 1918, 19, 20. Sold to Davidson Bros., S.A., at 100 guineas.



ELHAM BARON I.

Dalry 2 of 1915. Sire Elham 98 of 1912 (imp.) Reg. 31290, Vol. xviii. K. or R.M.F.B., dam Elham ewe (imp.). No. 203 of 1912. Reg. 4762. One of the leading sires 1918, 19, 20, 21.

THE Cardington Romneys, founded in 1903, were added to in 1905 by the importation from C. FILE, of Kent, of the Ram Elham Jumbo and Elham Ewes—40 of 1903, 10 of 1903, 64 of 1903, 81 of 1903, 104 of 1903, 112 of 1903, 60 of 1903, 12 of 1903, in lamb to Windsor 63rd and Windsor 71st. Since which date no Ewes, except those of Elham strain, have been added to the stud, and only imported English Rams, or their progeny, have been used—principally of Elham strain. Individual pedigrees have been kept since 1903, and every Ewe and Ram retained in Stud have been registered individually in A.L.S.A. Flock Book.

Rams and Ewes of the Elham Strain for Sale.

Apply to—

GEORGE F. DOYLE, Cardington Hall, MOLONG, N.S.W

PENROSE STUDS of Pure Bred LINCOLN & ROMNEY Sheep.

Registered in the Lincoln Sheep Breeders' Association's Flock Book and the N.Z. Romney Association's Flock Book.



RANGATIRA V.
Lincoln Ram bred by Wm. Perry

ANNUAL SALE
is held during 3rd week in
January of each year.

For particulars
apply:

Wm. PERRY, Penrose, Masterton, N.Z.



CHANCELLOR IV.
Romney Ram bred by Wm. Perry.

BOLARO ROMNEYS

Registered Aust. Longwool Sheepbreeders' Association, Flock No. 23.

The PROPERTY of S. M. OSBORNE.

Bred on high country and *grass-fed*. Noted for
*great constitution and very heavy,
dense fleeces.*

The following prizes were won at the N.S.W. Sheepbreeders' Show, 1919 (the largest show of the breed in Australia):—Champion Ram, Reserve Champion Ram. 1st and 2nd prizes for ram over 2 years, 1st and 3rd prizes for ram over 1 year and under 2 years, 2nd prize for ram under 12 months. Reserve Champion, 1st and 3rd prizes for ewe over 1 year and under 2 years. 1st, 2nd and 3rd prizes for ewe under 12 months old, 1st and 3rd prizes for pen of 2 rams under 12 months old, 1st prize for pen of 2 ewes under 12 months old.

STUD and FLOCK RAMS always
on Sale at reasonable prices.

For further particulars apply—

FRANK FILE, "BOLARO,"
COOMA, N.S.W.



BOLARO No. 15 of 1916.
1st and Champion of N.S.W. Sheepbreeders' Show, 1919

The Sheep which sells to-day is the _____

Suffolk Sheep

Record after Record at Recent Sales. Demand from all Parts of the British Isles.

Unbeaten
Record
on the Block.



Ideal
Hosiery Wool
—Good 56's.

Ten Two-tooth Ewes sold for £500 (a record for ewes of any breed), Champion Pen Society's Sale.
Champions over all Breeds, London Smithfield Show, 1919.

Special Sales at Ipswich July, August and September.

For Full Particulars and Expert Selection apply to:—

THE SECRETARY, SUFFOLK SHEEP SOCIETY, 25 MARLBOROUGH ROAD, IPSWICH, ENGLAND.

Quested's Romney Marsh Stud Flock and Herd of Pedigree Red Poll Cattle.



QUESTED'S No. 11 of 1917.

Champion Ashford Show, 1918. Sold by Public Auction for 1,000 guineas. Resold at Buenos Aires for record price of £1,600.

Over 500 PRIZES

Won for Sheep including:

**CHAMPIONSHIP CUP for BEST FLOCK of
ROMNEY MARSH EWES in England.**

Championship Cup won at Ashford Show
and Sale **Five Years in succession. TEN
Challenge Cups** won outright at this Show.

1438 Stud Ewes to Ram in 1918.

Individual Pedigree of every sheep since
1894.

For particulars apply to Owner:

J. EGERTON QUESTED

"The Firs," Cheriton, Kent,

ENGLAND.

Cable Address: **ANIMALS SHORNCLIFFE CAMP
Railway Station, SHORNCLIFFE, S. E. & C. Railway**

Streanshalh Corriedales



WHITE ROCK.
Bred at Streanshalh and winner of five championships and many first prizes.

Registered Flock No. 3.

Founded in 1904 on the importation of 41 pure ewes and one ram from C. H. Ensor's White Rock (N.Z.) Stud, since when only the purest rams have been introduced.

The stud has been very successful at leading shows in Tasmania, while the wool from flocks that have used Streanshalh rams usually commands record prices in the Tasmanian market.

Stud and Flock Rams for Sale.

Apply the owner—

NORMAN NICOLSON,
Streanshalh, Macquarie River, Tasmania.



Grand Champion Corriedale Ram, Sydney, 1920. Purchased subsequently by N. Nicolson.



Oxford Down Yearling Ram. First prize winner at the Cardiff Show of the Royal Agricultural Society of England, 1919.

Oxford Down Sheep

The Oldest Registered Flock.

Individual Pedigree of every sheep. Owned by Hugh Stilgoe, The Grounds, Adderbury, Banbury, Oxfordshire, England. The sheep of the present and the future. Unequaled as a pure breed, or for crossing purposes. They combine beautiful wool, with the best of meat, and will thrive in every part of the world. Many First and Champion prizes. Show Record 1919:—Royal Agricultural Society of England's Show at Cardiff, First and Second Prizes for Yearling Rams, First and Second Prizes for Wool. Birmingham Show, First and Second Prizes for Lambs. London Show, First and Second Prizes and Breed Cup for Lambs.

Telegrams:—"Stilgoe, Adderbury."

THE CARR'S PLAINS IDEALS

The IDEAL Sheep are finer in the wool than the Crossbred. They have been bred rather towards the Merino, and the fibre is more of the character usually yielded by a Comeback. This accounts for the high price obtainable for the clip, and gives it an unique character. The Carr's Plains Ideals are

AUSTRALIAN BRED SHEEP FIXED TYPES

They cut the same weight of wool as ordinary Merinos and get the same price, but they realise more per head for the whole fleece because they cut much more fleece wool and less skirtings than the Merino; also the carcass is bigger and returns more than Merinos.

For fuller particulars and samples of wool, write to:—

**H. H. WETTENHALL
AND SONS**

Carr's Plains, via Stawell, Vic.

WELLINGTON LODGE STUD South Australia.

Merino Sheep.

Pure bred for 60 years. Founded on Learmonth blood, and later Canowie, Wanganella, and Murray blood.

A few selected and flock 1918 rams for sale.

Shorthorn Cattle.

Pedigree Shorthorns of Angas, Derrimut and imported blood.

A few young bulls and heifers for sale.

Thoroughbred Horses.

Colts and fillies from yearling upwards, by Kerlie and lownit, usually a few of each for sale.

Apply—

ALLAN McFARLANE, Wellington Lodge, East Wellington, S.A.,
BENNETT & FISHER, Bowman Buildings, Adelaide.

"The two most profitable general utility breeds."

Corriedale Sheep

for constitution, carcase, big lambings and bulky fleeces of even type and high value.

The Corriedale Park Stud, Wagga Wagga, New South Wales (Australian Corriedale Breeders' Association Flock No. 1), founded in 1882 by mating Stud Merino rams and Stud Lincoln ewes, inbred ever since, an outcross obtained by the introduction of the very highest grade of Stud rams, mainly from the N.Z. and Australian Land Company's

Moeraki Stud, New Zealand (founded in 1874).

During the past five years sheep from the Corriedale Park Stud have taken over 100 first and 20 Champion Prizes at Australian Sheepbreeders' (Victoria), N.S.W. Sheepbreeders' (Sydney), Melbourne Royal, Wagga Wagga, Albury, and Hamilton Shows.

RAMS cut from 15 to 25 lbs. wool. EWES cut from 10 to 15 lbs. wool. Pen Pure Corriedale Wethers sold in Melbourne Sale Yards at £5 per head. Wool grown in Riverina appraised Geelong, 1917, at 23½d. per lb.

NOTE.—Inspection of original letters from purchasers from all over Australia invited.

It pays to have the best.



Corriedale Rams, Ewes, Lambs, and Wethers.

Bred by, and the property of, J. F. GUTHRIE, Corriedale Park, Wagga Wagga, N.S.W.

500 Pure Rams (Poleys) of 1919 drop, for delivery at from 5 guineas upwards.

Red Polled Cattle



FLIGHT COMMANDER, 21 months, by Belligerent (imp.) ex Birdseye.

The most prepotent breed—splendid milkers, ready fatteners to heavy weights.

The Stud at Corriedale Park was secured from Mr. Ben Osborne, of Redbank, Harden, New South Wales—all imported or descended from high-class imported cattle.

The young stock are by **RENDLESHAM ELECTOR (imp.)**

Sire now in use **FLIGHT COMMANDER** by **BELLIGERENT (imp.)**—Dam, the famous cow, **BIRDSEYE**.

Pedigreed bulls for sale at from 40 guineas upwards.

APPLY J. F. GUTHRIE, Geelong, Vic., OR ANY AUSTRALIAN STOCK AGENTS

THE WHITE ROCK CORRIEDALE STUD FLOCK

THE NEW BREED OF THE NEW CENTURY.

Wool clip equal in value to the best Merino flocks.

Mutton and Lamb the finest quality grown in Canterbury.

Robust constitutions and an up-to-date sheep.

Weight of fleece up to 28 lbs.

Corriedale wool highest price in New Zealand markets.



Corriedale Stud No. 1-18, sold in Sydney July 1920.
Grand Champion Sydney, 1920.

A GREAT COMBINATION OF WOOL AND MUTTON.

Champions International Show, 1906.

Champions, Rams and Ewes, Canterbury Metropolitan Show, 1910.
Champions at Launceston and Hobart Shows, 1910-1911, bred from this flock.

Grand Champion, Sydney, 1920.

Stud Rams and Ewes delivered at any port in the world.

Recent Exportations have been made to all the States in Australia,
South Africa, America, British East Africa, all parts of New Zealand, and other places.

Flock Established 1889. Registered N.Z. Flock Book.



Two Corriedale Stud Rams sold in Sydney
July 1920.

VARIOUS SHOW RECORDS INCLUDE—

PANAMA EXHIBITION, U.S.A. — Champion and Reserve Champion Rams, Champion Ewe. Also other prizes. Gold and silver medals for wool (fleeces).

SYDNEY SHEEP SHOW, N.S.W. — Grand Champion Rams and Ewes 1915. Many other prizes.

BRISBANE EXHIBITION, Queensland. — Champion Rams and Ewes 1915. All other prizes.

NEW ZEALAND SHOWS. — Champion Ram Ashburton Show, also Stringfellow Memorial Cup. Champion Ram Nelson Show. Champion Ewe Rangiora Show. Many prizes Christchurch Show, including the Corriedale Cup for most valuable combination of wool and mutton, single ram, also the Quibell Cup for best average value three rams. Half-breds competed for this also. Different teams of sheep competed at each of these Shows. Practically all were sold 1915. Reserve Champion and other prizes, Christchurch, 1919.

PROGRESS.

The greatest invention in modern Sheep Farming is the Freezing Industry. The Freezer opens to the Sheep Farmer the Meat Market of the whole world. Before only Wool could reach the World's Markets.

PROGRESS.

To-day it is most profitable to grow sheep which combine the wool value of the Merino and the meat value of the British Breeds.

THE CORRIEDALE REPRESENTS PROGRESS.

FLOCK AND STUD RAMS FOR SALE.

For Particulars apply to

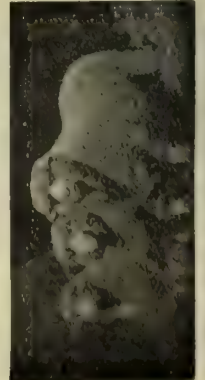
C. H. ENSOR, White Rock, Rangiora, N.Z.

OR TO YOUR AGENTS.

Note the bold appearance,
denoting constitution.



Note the evenness of type
these sheep show.



BUSHEY PARK CORRIEDALES

(Registered).

Foundation: Lincoln—Merino.

This flock was founded by the purchase of over 1000 specially selected studs at the dispersal of Mr. Leonard White's famous flock (No. 9, N.Z.F.B.)

CONSTITUTION.

Note the shape of these sheep. They have robust constitution and large symmetrical frames, as well as heavy fleeces.

WOOL.

The wool is a dense, shaggy, true halfbred, and is noted for its excellence of character and length of staple.



PREPOTENCY.

Having been carefully line-bred for many generations, the whole flock shows a strong family likeness and fixity of type. The rams are consequently extremely prepotent, having the power of impressing their characteristics on their progeny.

SHOW YARD RECORD.

The Canterbury Agricultural and Pastoral Show, held annually in Christchurch, is the "Mecca" for Corriedale sheep in New Zealand. For many years Mr. White's sheep have been great prize takers. His latest achievement was the winning of the Championship Gold Medal for Ram, and the Corriedale Cup for most points in rams in 1919.



STUD & FLOCK RAMS FOR SALE.

For particulars apply to

WRIGHT, STEPHENSON & CO. LTD., Stud Stock Salesmen. P.O. Box 462. Dunedin, N.Z.

or The Proprietor,

J. A. JOHNSTONE, Bushey Park, Palmerston South, N.Z.

TEVIOTDALE REGISTERED CORRIEDALES

The Drought Resisting Breed

These Sheep have been bred on the Teviotdale Estate for 38 years, and are the heaviest clipping Corriedales in the Dominion.



TEVIOTDALE CHAMPION RAM.

They are guaranteed to breed Absolutely True to Type.

They have been under the charge of the originator since the inception of the flock

Experience with these sheep during the recent drought at Tocal Station in Western Queensland, proves them to be ALL BUT DROUGHT RESISTING.

Where Merinos died, THE CORRIEDALES SURVIVED.

The recent successes of this flock comprise:—

At the Panama Pacific Exhibition

Reserve Champion Ewe

First and Second Prizes for Ram Lamb. First and Second Prizes for aged Ewes. First, Second, and Third for Yearling Ewes. Second for Yearling Ram. (No aged ram from this flock was exhibited.)

Corriedale Wool is the best for Khaki

In the wool section at the Panama Exhibition, Teviotdale wool was the admiration of all experts, and secured the following awards: 1 gold medal, 2 silver medals, 1 bronze medal.

There is no doubt that the Corriedale is the future general purpose sheep for highest quality of wool and mutton.

At the scouring competition last November Teviotdale sheep again gained first place for heaviest fleece.

Rams and Ewes for sale in quantities

G. D. GREENWOOD (^{Originator}_{of the Breed}), Teviotdale, Amberley, New Zealand

The Rakahuri Corriedale Flock



Champion Corriedale Ram, Rangiora, 1915.
Bred by Hugh Ensor.

or HUGH ENSOR, Rakahuri, Rangiora, Canterbury, New Zealand.

One of the best quality and heaviest
woolled flocks in New Zealand.

Established the record price of
19¼d. for Corriedale Greasy
Fleece Wool at the Christ-
church sales, Nov. 11th, 1915.

For shape and constitution the
Rakahuri sheep cannot be sur-
passed. Winners of many prizes.
Flock established 1889. Registered
N.Z. Flock Book.

STUD and FLOCK RAMS FOR SALE.

For full particulars apply to—

DALGETY & CO. LTD.

The N.Z. & A.L. Co.'s Corriedales



2-Shear Ram.
Champion at Christchurch, Nov., 1920, and at Dunedin, Feb., 1921.

The Company's flocks are No. 1 and No. 2 in the New Zealand Flock
Book, and are the oldest in existence. Show-yard successes during the
last 10 years have been very numerous, and include in that time 10
championships at Christchurch, the premier show for the breed in
New Zealand.

The New Zealand and Australian Land Company's New Zealand
Corriedale Flock originated at the Levels Estate in Canterbury in 1874,
when Mr. W. S. Davidson, the present General Manager, put 1000
specially selected Merino Ewes to Lincoln Rams, and their progeny,
kept absolutely pure, now number over 6000 Ewes. The Flock was
kept at The Levels until that property was resumed by Government
in 1904, when part of the Corriedales was sent to Hakatarama, in
Canterbury, and the remainder to Moeraki, in Otago, since which the
purity has been strictly maintained.



Prize Winning Ewe Hogget.

STUD and FLOCK RAMS FOR SALE.

APPLY TO THE

New Zealand and Australian Land Co. Ltd., DUNEDIN.



Hereford Cows are regular breeders over a long period



NE of the most notable points about the Hereford Cow is her regularity in coming along with a good calf every year.

The Herd Books show many cows that have bred regularly for ten, twelve or more years. Recently we noticed a cow that had reared fifteen calves in sixteen years. She dropped her first calf in 1905, and her fifteenth last year. She is due again in July.

Is this the sort of cow you want in these days?

If it is, you will be able to fill your needs from the herds of the following breeders:—

R. S. Archer, Gracemere, Q.
J. H. S. Barnes, Canning Downs, Warwick, Q.
J. A. Beattie, Gisborne, Vic.
J. M. Bell, Coochin Estates Co., Coochin Coochin, Boonah, Q.
J. Biddlecombe, Golf Hill, Shelford, Vic.
F. E. Body, Heathbogie, Emmaville, N.S.W.
A. W. Bootes, The Island, Tumblong, N.S.W.
C. L. Brosn, Glen Innes, N.S.W.
C. J. Campbell, Rangers Valley, Glen Innes, N.S.W.
T. A. Clapperton, Nanango, Q.
S. W. Cooke, Murndal, Hamilton, Vic.
H. Cory, Vermont, Warwick, Q.
H. W. Curtis, Abbey Green, Llangothlin, New England, N.S.W.
Dr. Dalrymple, Pinnacle, Mackay, N.Q.
F. Dearden, Dalsymount, Tenterfield, N.S.W.
W. A. Dehnert, Ballan, Vic.
Dookie Agricultural College, Dookie, Vic.
W. V. Dowling, Gumin, Warrumbungle, N.S.W.
W. H. Edwards, Coongoola, Colosseum, Q.
H. F. Elwyn, Tindal and Son, Gunyan, Inglewood, Q.
J. H. Fairbairn (Ryrie Estate), Micalago, N.S.W.
Fenwick Bros., Myall Creek, Glendon, via Singleton, N.S.W.
H. L. Lindsay-Field, Warbreccan, Deniliquin, N.S.W.
W. H. Friend, Laurel Park, Burradoo, N.S.W.
L. W. Guymer, Waverley, Silver Spur, Inglewood, Q.
Halford and Willis, Bundoran, Dunkeld, Vic.
A. L. Harris, Condel Park, Maldon, N.S.W.
W. S. Hendry, Chinchilla, Q.
Mrs. Lumley Hill, Bellevue, Coominya, Q.
G. H. Horne, Rockfield, Gladstone, Q.
C. W. Huf, Elgin, Braemar-street, Essendon, Melbourne, Vic.
F. C. Hughes, Boomp, Q.
A. A. Kemp, West Kempsey, Macleay River, N.S.W.
F. W. Kennedy, Kendlea, Upper Rouchel, N.S.W.
K. H. M. Kennedy, Carbean, Quirindi, N.S.W.

J. P. Lawless, Goomeri, Q.
W. M. Loder, Aytondale, Singleton, N.S.W.
Lord and Sons, Eskdale, Esk, Q.
C. M. Lowe, Lowe Bros., Yamble, Gulgong, N.S.W.
H. M. Mair, Colly Creek, Willow Tree, N.S.W.
Farquhar Maxwell, Maxwellton, South Grafton, N.S.W.
A. J. McConnel, Dugandan, Boonah, Q.
Edgar McConnel, Cressbrook, Toogoolawah, Q.
C. H. McKeahnie, Booroomba, Queanbeyan, N.S.W.
Thos. Muirhead, Jas. Gibson Est., Belle Vue, Epping, Tas.
Mulcahy Bros., The Grange, via Nanango, Q.
A. Murphy, Ferndale, Blandford, N.S.W.
Norton Bros., Elswick, Walcha, N.S.W.
F. C. K. Pitt, Glen Dhu, Ouse, Tas.
J. Ralston, Sandylands, Tabulam, N.S.W.
D. F. Reynolds, Tocal, Paterson, N.S.W.
Percy Reynolds, Hobartville, Richmond, N.S.W.
Raymond Reynolds, Duninald, Paterson, N.S.W.
Roy Reynolds, Ennis View, Oakey, Q.
Sid. Reynolds, Duninald, Paterson, N.S.W.
Manager, Ruthven Station, Isisford, Q.
Jas. Sparkes, Lyndley, Jandowae, Q.
A. H. Stirratt, Euroa, Gladstone, Q.
A. J. Taylor, Winton, Campbelltown, Tas.
C. H. Tindal, Ramornie Est., South Grafton, N.S.W.
L. B. Tomes, Junabee, Warwick, Q.
C. H. Turich, Heidelberg, Benaraby, Q.
J. T. Turnor, Holmwood, Woodford, Q.
Van Diemen's Land Co., Burnie, Tas.
H. H. Waddell, Benvenue, Gayndah, Q.
W. Wallace, Wallacedale, Kergunyah, Vic.
G. B. Waller, Wallarobba, N.S.W.
Estate late R. W. White, Blandford, N.S.W.
Wilson & McDouall, Calliope Station, Calliope, Q.
C. M. Wright and Sons Ltd., Wallamumbi, Armidale, N.S.W.
W. H. Yelland and Sons, Treverder, Newlyn, Vic.

Australian Hereford Society

303 Queen Street, BRISBANE.

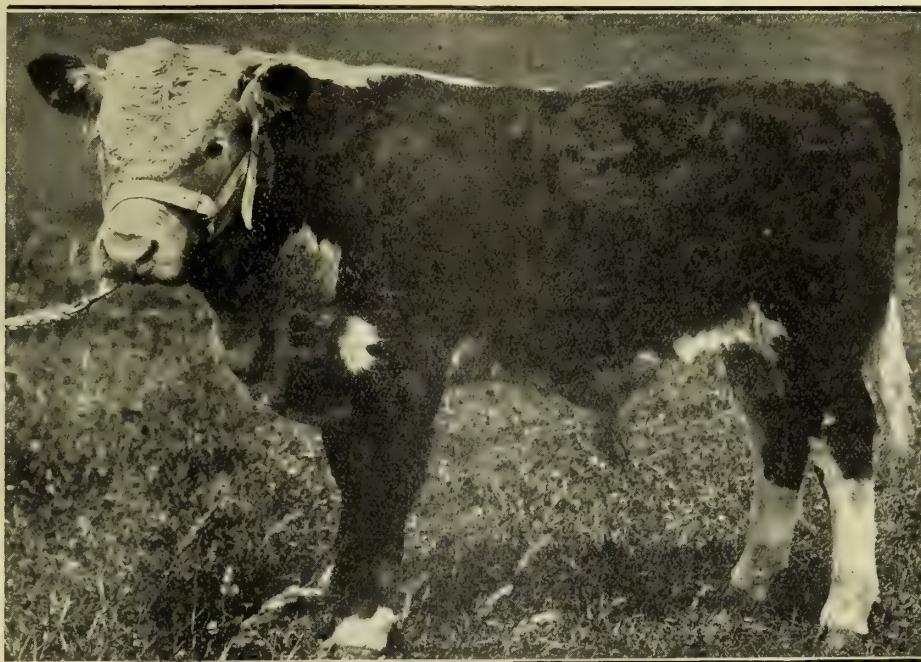
"Indiana"

Stud Bull Calf by

"President Wilson"

(imp.)

Age when photographed
24 weeks and 5 days.



Bushy Park Stud of HEREFORD CATTLE

This Herd is now composed of a small but very select group of magnificent Cattle, every individual in which is first-class. In fact, it may safely be said without the slightest exaggeration that in no part of the world could they be excelled.

Possessing as they do the great advantage of being reared under natural conditions, absolutely without housing or forcing—even those which are being prepared for Showing being left out at night—it will readily be seen how valuable they must be for breeding good sound-constitutioned stock. None but long-pedigreed animals are kept in this Herd.

Efforts are now being made to secure shipping for stud stock from New Zealand to South America, which will no doubt be arranged within the next year or so, and it behoves all Hereford breeders to place themselves in a position to take advantage of this great market.

There are now available for private sale at Bushy Park the following high-class Bulls at very reasonable prices:—

Two two-year-old Stud Bulls by "Rufus" (imp.)

A grand selection of Stud Yearling Bulls by "Rufus" (imp.): "Elect 19th," "Maymorn" and "Count Rufus."

The 1920 calves by "President Wilson" (imp.) are a magnificent lot—the best that have ever been at Bushy Park, both bull and heifer calves being equally good.

Anyone desiring to secure a bull calf by "President Wilson" (imp.) should apply early.

There is also a splendid lot of two-year-old Run Bulls and a few Run Yearlings, all of which have been handled and tied up.

For particulars apply:

FRANK MOORE
BUSHY PARK, KAI IWI
WANGANUI, NEW ZEALAND.

BELLE VUE HEREFORDS.

The Estate of the late JAMES GIBSON, BELLE VUE, EPPING, Tasmania.



ROSADOR.

Bred by Henry Beattie & Sons, Vic. Sired by Royal Duke, dam, Lady Roseberry 2nd. Purchased by the Trustees James Gibson Estate in 1908.



BELLE VUE ROSADOR 4th.

Three years old. Bred by Trustees James Gibson Estate. Sired by Rosador, dam, Lady Betty. Was Champion Hereford Bull at the principal Tasmanian Shows in 1918 and 1919.

BELLE VUE MERINOS

Belle Vue is the home of the famous Sir Thomas flock All Belle Vue sheep are descended from Sir Thomas and the same original lot of pure ewes.

FOR PARTICULARS APPLY—

THOMAS MUIRHEAD, The Manager, BELLE VUE, EPPING, Tasmania.



LADY PRESIDENT 8th
2 weeks old.

LADY PRESIDENT 4th.
3 years 11 months old. Weighed 1615 lbs. at Aug. 1919 Brisbane National with Lady President 7th as calf at foot and she took 1st prize then as cow 2 yrs. and under 3 yrs.

ISIS 2nd.
1 year 8 months old.

LADY PRESIDENT 7th.
1 year 1 week old.



9-month-old Bull Calves

High-class Stud and Herd Bulls for sale.

All females and bulls used in the herd are entered in the Herd Book.

Herd established nearly 50 years.



9-month-old Bull Calves.

CRESSBROOK HEREFORDS

Apply to—

EDGAR C. McCONNEL,
Cressbrook, Toogoolawah, Q.

LYNDLEY HEREFORDS

Founded on Reynolds, Beattie & Imported Stock.

All herd bulls are pure bred, only Stud Book bulls and cows used.

Lyndley Herefords exhibited since 1913 on 7 occasions and have won 8 Championships, 11 Reserve Championships, 58 firsts and 35 seconds, and hold the Australasian record price 1125 gns.



MANSEL BANNER PRINCE (imp.) 37,357 E.H.B. Age 1 year 3 months.
Now used in Lyndley Stud.

Stud bulls and heifers for sale. Also pure herd bulls.

Inspection Invited.

Apply **JAMES SPARKES, LYNDLEY, JANDOWAE, QUEENSLAND**

EAST TALGAI ABERDEEN ANGUS STUD

The East Talgai Aberdeen Angus Stud was formed some years ago by the importation of 8 high-class cows and a bull from the leading studs in New Zealand. In 1917 the whole of the Boolarwell, Queensland, stud of pure cows was purchased and since then two high-class stud bulls have been secured at high figures, viz., Mahoe of Akitio, bred by F. Armstrong, Akitio, N.Z., and Proud Peer of Tolarno, bred by the late W. C. Grubb, of Tasmania, both of which are now in use in the stud. The herd at present consists of about 70 breeding cows with a fine lot of heifers coming on. Numerous prizes have been taken at the Brisbane Exhibition and other Shows in Queensland.



"Proud Peer of Tolarno."



"Scottish Queen." Imported from New Zealand.

The 1919 drop of bull calves will be ready for sale towards the end of this year.

Apply **GEORGE C. CLARK, East Talgai, Elinthorp, Queensland.**

GUNYAN HEREFORD STUD HERD.

STUD & HERD BULLS FOR SALE

All Females are eligible for Entry in A.H.H.B.

Stud Bulls in use at present—

Magnitude (imp.), winner Championship, Brisbane, 1918, Rosador 2nd (First Prize, Sydney), Wonder 3rd (First Prize, Sydney), Sir Edgar (First Prize, Sydney), Lord Lyndley (First Prize, Brisbane).

Apply to

TINDAL & SON, Gunyan, Texas,
via **Inglewood, Queensland.**



MAGNITUDE (imp.)

MANSEL COURT STUD HERD.

THREE FIRST-PRIZE WINNING YEARLING BULLS

From a pen-and-ink sketch by
Frank Calderon, R.A.

Reading from the left: MANSEL BANNER MASTER (37354), 1st prize Royal Show, 3rd prize Worcester; MANSEL BANNER GUARD (37350), 1st prize Royal Counties Show; MANSEL BANNER REX (37359), 1st prize Bath and West, 1st prize Hereford and Worcester Agricultural Society's Show.

Four first prizes have thus been won by three different bulls from one herd—a record.

Apply to—

CAPTAIN R. T. HINCKES,

Mansel Court, Hereford, England.



NEW YEAR'S GIFT. 18 months old.
Bred at Gracemere. Sire, Prince Regent 534. Dam, Fancy 215.

GRACEMERE & TORSDALE STUD HERDS

Shorthorns. Herefords. Red Polls.

HIGH CLASS BULLS FOR SALE.

Bred on Red Water Country and inoculated for Pleuro.

ARCHER BROS. Ltd., Gracemere, Qld.

GISBORNE PARK STUD HEREFORDS

English Leicester and Corriedale Sheep

THE HEREFORD STUD was founded 1869 from imported stock. Noted for robustness of constitution, heaviness of flesh and truthfulness of type. Bred and reared nearly 2000 feet above sea level.

The whole Stud has been tested with Tuberculin, and found sound and free from Tuberculosis.

THE ENGLISH LEICESTER STUD was founded 1908 on the good old New Zealand blood. Noted for their hardy constitution and early maturity.

THE CORRIEDALE STUD was formed 1920 on ewes personally selected from leading New Zealand Studs. Famous for wool and mutton. The utility sheep.

J. A. BEATTIE **GISBORNE PARK**
Phone 13 ——— **GISBORNE**



ROYAL BOY 4TH. Stud Sire at 3 years.



Imported Polled Angus Bull, Carolus of Mulben.

EDINGLASSIE POLLED ANGUS STUD

The property of White Bros., Edinglassie, Muswellbrook, N.S.W.

THIS Stud is founded and built up on blood imported from the best herds in Great Britain regardless of cost, and has been so maintained for the last 20 years.

Young Bulls for Sale, delivered on rail at Muswellbrook.

Further particulars on application to

White Bros., Edinglassie, Muswellbrook, N.S.W.

RAMORNIE HEREFORD STUD HERD

Founded on stock from the famous Gunyan Stud.

Stud and Herd Bulls for sale.

All Herd Bulls are pure bred, only Stud Book Bulls and Cows used.

Apply:—

C. H. TINDAL, Ramornie, Copmanhurst, N.S.W.



COMMODORE 2nd. By MAGNITUDE (imp.)
At the age of 2 years and 3 months.



"LOVELACE" (imp.)
1st Royal Show, Cardiff, Wales, England, under 12 months 1919.

Mrs. C. Lumley Hill.

BELLEVUE STUD HEREFORDS

Bellevue, Queensland

Composed of Pedigree Cows with pedigrees running back ninety years in Stud Books, including such famous Championship Sires as:—"Field Marshal," "The Admiral," "Lord Clare," "Lloyd George" and "Lovelace" (imp.), bred by Sir John Cotterill, Bart., Garnons, Herefordshire, England. Best class Pedigree Stud Bulls and Herd Bulls for sale by Stud Book Sires from England, New Zealand and Southern Colonies.

Apply to **THE MANAGER, Bellevue, Q'land.**

The

MICALAGO Stud

**The property of the Executors
of the late Hon. A. Ryrie, M.L.C.**

The Micalago Hereford Stud is founded on Stud Bulls and Heifers purchased from the noted breeders, Messrs. S. Reynolds, "Duninald," Patterson, N.S.W., P. Reynolds, "Hobartville," Richmond, N.S.W. The Stud is noted for robustness of constitution, bred and reared 2301 ft. above sea level.

In 1920, the "Hereford Stud" gained two (2) Champion Prizes, nine (9) Firsts, one Second at Southern Shows, and, in a field of 36, in the class one year and two, at the Royal Jubilee Sydney Show, Third Prize with "Paris," by "Monte Carlo" 3rd, No. 732 A.H.B., Dam, "Spot" 13th, Vol. 6, A.H.B. In 1921 the Stud won two Championships, six First Prizes and one Second.

Inspection invited, apply

The Manager, "MICALAGO," Michelago, N.S.W.



**MONTE CARLO 3rd.
No. 732, A.H.B.**

BENVENUE STUD HERD OF HEREFORD CATTLE.

Established at "Benvenue," Singleton, N.S.W., in 1873.

The W.W. BRAND is well known in Queensland.

IMMUNE.



LANSDOWNE (imp.), 2 years 5 months

STUD & HERD BULLS FOR SALE.

All herd bulls are pure bred.
Inspection invited.

**H. H. WADDELL,
Benvenue,
GAYNDAH, Q'LD.**



"COTMORE"—1st Prize Grand
Champion, B. A. S., Sydney, 1911.

DUNINALD Stud and Herd.

HEREFORD CATTLE.

Stud Bulls and Heifers for Sale; also Pure Herd Bulls. All Herd Bulls bred at
Duninald are pure bred. Inspection invited.

Correspondence should be addressed—S. REYNOLDS, Duninald, Paterson, N.S.W.

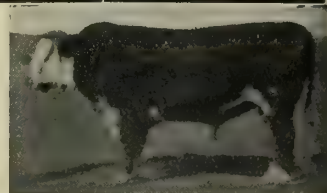
"ABBAY GREEN" STUD & HERD HEREFORD & DEVON CATTLE

The "Abbey Green" Hereford and Devon Herds were founded by the purchase of bulls and cows
from the best herds in New South Wales and South Australia in 1908. Only best bulls procurable
used since.

The cattle are noted for their hardiness, being bred 5000 feet above sea level, and mature very
quickly when taken into hot climates.

YEARLING STUD AND HERD BULLS FOR SALE

Full particulars from **H. W. CURTIS, "Abbey Green," Llangothlin, N.S.W.**



"Curley" 96, aged 4 years. Used in
Abbey Green Hereford Stud, 1918-20



EATON CONQUEROR. (IMP.)
Aged 2 years 2 months. Live weight, 1820 lbs

Hobartville Stud

Hereford Cattle.  Thoroughbred Horses.

High-class Stud Stock for Sale. Inspection Invited.

Apply **PERCY REYNOLDS, Hobartville, Richmond, N.S.W.**

Stud Bulls and Heifers for
sale; also Pure Herd Bulls.

All Herd Bulls bred at
Tocal are perfectly pure bred,
which gives them a great
advantage over the ordinary
grade bulls.

Inspection invited.

Correspondence should be
addressed—

TOTAL Stud and Herd.

Hereford Cattle

and THOROUGHbred HORSES.

*The Oldest Herd in Australia.
Established at Tocal in 1844.*

Estate F. REYNOLDS, Tocal, Paterson, N.S.W.



"WONDER."



ROYAL FAME at 9 months.

Amateur Kodak enlarged.

GARNONS HEREFORDS

The property of

**Sir J. R. G. Cotterell, Bart., Garnons, Hereford,
England.**

ROYAL FAME, v. 51, at 9 months. Sire Sovereign 35628, dam Queen Elizabeth
by Administrator 27298. Bred by Sir J. R. G. Cotterell, Bart. Sold at a high
price to Senor Rodriguez, Uruguay.

During the last 20 years the Garnons Herd has won some 300 Champion and
other prizes at all leading Breed and Fat Stock Shows in England. Stock Bull
Saladin 31957, sire of Sovereign 35628; 1st and Champion Herefordshire and
Worcestershire A.S.; 1st and Reserve Champion Royal Agricultural Soc., Cardiff;
1st Lord Tredogor's Newport, and sold for 4,000 gs.; Lovelace, 1st Royal Agri. Soc.;
Minstrel, 1st Royal Counties, Reading; Steer, 1st Smithfield Club.

Catalogue of Herd on application.

COOMBING PARK SHORTHORNS



BOLINDA DUKE OF DERRIMUT 400th.

Founded on high-class female stock of Lee and Lowe blood. Extensive purchases of pedigreed cows have also been made from the studs of the late James Holmes, Bathurst; Sir Rupert Clarke, Bolinda Vale; and Mr. Norman Falkiner, Noorilim, Victoria.

The bulls now in use are from
Bolinda Vale.

**STUD AND HERD BULLS
FOR SALE.**

THE WHITNEY PASTORAL CO., Coombing Park, CARCOAR, N.S.W.

BARRAGAN STUD AND HERD

No pampering———All grass fed———Rich colours.

50 Years of careful breeding.

THE BARRAGAN HERD was founded nearly 50 years ago by the late E. Tindale, by the purchase of choice cows from the stud of the late Thos. Lee, Woodlands, Bathurst, and at the clearing sale of W. and J. Lee, of Millbank, Bathurst, whose cattle were descended from the original stud of Wm. Lee, Claremont, Bathurst. Sires used were from the studs of S. Gardiner; Robertson Bros., Colac; J. H. Angas, and the choice of John Lee of Bylong's bulls. Duchess females were also secured from the McCulloch dispersal sales.

The present owner purchased the above foundation, and has since added from the last McCulloch dispersal other females of the Persis (imp.), Lobelia (imp.), May Rose, Lady Weston, and Charmer strains; also the imported bull Prince Millicent (96519).

Bulls now in use were prize winners in large classes at Royal Sydney and Royal Melbourne Shows—Lord of the Vintage and Mahonga's Comet.

**Stud and herd bulls eligible for entry
in the herd book for sale.**



PERSIS VII.

Also pure pedigreed Berkshire pigs and Lincoln rams (registered flock).

The property of

R. S. HARRIS, BARRAGAN, BARRAGANDAH, VIA MUDGEES, N.S.W.

Telegrams—WOLLAR.

HAMBLEDON HILL SHORTHORNS

Bulls for Sale.

Bolinda Duke of
Derrimut 425th
White,
Calved August, 1917.
Sire,
Bolinda Duke of
Derrimut 391st.
Dam,
Bolinda Duchess
of Derrimut 468th



"GRAND DUKE CLIFTON."

The Stud Sire in use from 1st February, 1921.

Bulls for Sale.

Hambledon Duke
of Derrimut 4th.
Dark Red,
Calved Nov., 1920.
Sire,
Zaretan Duke of
Derrimut 24th.
Dam,
Bolinda Duchess
of Derrimut 486th

Lloyd Jones, Hambledon Hill, Singleton, N.S.W.

BINNIA DOWNS SHORTHORNS



BARITONE

Champion Shorthorn Bull, Sydney Royal, 1918; 1st and Champion, Sydney Royal, 1920, and Governor-General's Cup; 1st and Champion, Melbourne Royal, 1920, and winner of Gold Medal awarded by the Shorthorn Society of Great Britain and Ireland. At Sydney Royal 1921:—First Prize in his class; Champion, Sir Samuel Hordern's Cup, and Gold Medal awarded by the Shorthorn Society of Great Britain and Ireland. Bought for 1,700 guineas. Now being used in the Binnia Downs Stud.

THE FEMALE STOCK ARE AN EXCEPTIONALLY HIGH-CLASS LOT.

STUD AND HERD BULLS FOR SALE.

For particulars apply—**J. McMASTER, Binnia Downs, Coolah, N.S.W.**

Founded in 1908, and built up on the best blood procurable from leading Victorian studs—J. E. Robertson, Glen Alvie; A. J. Simpson, Clifton; John James, Derrimut; Ball Bros., Zaretan; A. J. Webb, Rathfarnham; N. Falkiner, Noorilim, etc.

The following additions to the stud were made by purchase at the Sydney Royal Show, 1918:—

Stud Bull **BARITONE**, 2 years 7 months, at 1,700 guineas, from Messrs. Parsons & Robertson, Watch Hill, Vic.

Stud Bull **HIGHTON DUKE of DERRIMUT**, 12 months old, at 1,000 guineas, from Messrs. Lidgett Bros., Vic.

Stud Heifer **ROYAL JESSAMINE** 89th, at 400 guineas, from Messrs. Parsons and Robertson, Vic.

Stud Heifer **DUNDAS DUCHESS of DERRIMUT** 13th, at 400 guineas, from Mr. A. J. Simpson, Clifton, Vic.

Edgecote Filbert (imp.) 1,075 guineas.
Rose of Chedglow 51st (imp.) C.H.B. Vol. 65.

Bianca Belle 9th (imp.) C.H.B. Vol. 64.

Hilda Warden (imp.) C.H.B. Vol. 64.

Aikbank Undine 4th (imp.) C.H.B. Vol. 64.

Further additions to the stud made in 1921 are:—Two Stud Shorthorn Heifers, purchased from Mr. A. J. Webb, of Rathfarnham, Vic.; viz.:—**LINDENOW DUCHESS of DERRIMUT** 113th, 1st Prize in her class, and **LINDENOW DUCHESS of DERRIMUT** 109th, 3rd Prize in same class at Sydney Royal, 1921.

"MILTON PARK" SHORTHORNS

A FEW
YOUNG
STOCK
FOR
SALE.



"Masterkey,"
sire of
the winning
female
group at the
Royal Show,
of England,
1920.

MASTERKEY (imp.)

For particulars of Stock For Sale, apply to—

The Manager, "MILTON PARK," Bowral, New South Wales.

LYNDHURST STUD, WARWICK, Q.



LYNDHURST ROYAL PEER.

Champion Bull, Brisbane, 1912-13-14-15- ; Toowoomba, 1914-15;
Warwick, 1911-12-13-14-16-17.

MURWEH, Charleville, Q.

THE MURWEH SHORTHORN STUD was formed in 1917, 400 high-class cows and heifers being sent there from Dulacca West with a number of high-class stud bulls, Lyndhurst bred, many of them prize takers, also the New Zealand bull, Diamond Crest. On the rich western country these cattle have done exceptionally well. The young bulls now for sale at Murweh are a very fine lot

Stallion—Hartfell. Ayr Laddie ex Light Heart, 10 gns.

NOW FOR SALE—Murweh:—500 Bulls. Lyndhurst, Dulacca West and Murweh bred, 2 and 3 years old. For particulars apply—

C. E. McDOUGALL, LYNDHURST, WARWICK, Q.; or McDOUGALL & CO., WARWICK, Q.

Pure Shorthorn Stud and Herd Bulls

Combining robust constitutions with depth of flesh and quality. The Sires used in the Lyndhurst Stud have all been prize winners and include Bapton's Patriot (imp.), Clippers Duke (imp.), Hampton Bowling (imp.), and Clogher Augustus (imp.). First Sydney and Champion Brisbane. The Sires now in use are Lyndhurst Royal Peer (winner of 13 Championship prizes, including 5 Brisbane Championships), Clogher Augustus (imp.), Lyndhurst Royal Peer 11th (4 Firsts Brisbane and Reserve Champion), 3rd Duke of Ettrick, and Lyndhurst Royal Peer 13th.

The cows are mostly direct descendants of 4 cows imported by the late Hon. J. D. Macansh in 1875, and include 25 cows selected from Mr. Baldwin's Durham Court stud in 1913.

The Lyndhurst cattle have been very successful at the Queensland National Association Show, Brisbane, having won 7 Championships with bulls and 4 with cows during the last 12 years, also any number of class and group prizes.

STALLIONS.

Chantemerle (imp.) Polymelus ex Amphoraria	...	...	...	50 gns.
Seremond (imp.) Desmond ex Serenata	...	...	...	30 gns.

DULACCA WEST STUD, Roma, Q.

THIS SHORTHORN STUD was formed in 1904 with 100 Lyndhurst Stud cows and has since been added to each year from Lyndhurst Stud; also includes purchases from Baldwin's Durham Court Stud. The sires in use are all high class and mostly prize takers.



DIAMOND FAIRY.—1 & R.C., Hastings, 2, Palmerston N., 1916; 1, Hastings, 2 & R.C., Palmerston, 1 & C., Carterton, 1 & C., Wanganui, 1917; 1 & C., Masterton, 1 & C., Marton, 1 & R.C., Hastings 1 & C., Carterton, 1 & R.C., Palmerston N., 1 & R.C., Feilding, 1918; 1 & C., Marton, 1 & C., Taihape, 1, Hastings, 1919, and winning sire with progeny.

BLAIR ATHOL STUD SHORTHORNS

First-Class Stud and Herd Bulls for Sale.

Write for Particulars

DALZIELL BROS.,

Hunterville, North Island, New Zealand.



2-YEAR AND 3-YEAR HEIFERS.

CLIFTON STUD Shorthorns

Old Established Herd of High-Class Shorthorns.

Carefully bred for constitution, quality and early maturity. Winners of many Champions and numerous other prizes at Sydney, Melbourne and Brisbane Shows. Where young sale stock command top prices.

A. J. SIMPSON, CLIFTON, HAMILTON, VICTORIA.



A Noted Clifton Stud Cow
BOLINDA DUCHESS OF DERRIMUT 400th.

BRUNETTE DOWNS (N.T.) STUD SHORTHORNS

***BULLS for Western Australia
and Northern Territory***

At **BRUNETTE DOWNS, N.T.,** via Camooweal, Q.

Bred on Tick Country

200 eighteen months to two years

By Bulls from Studs of Dangar, Bracker, McDougall, Lomax and Cotton, out of progeny of a stud herd of Cows sent from the A. A. Co.'s Gloucester property

Price : **£12/12/-** at Station.

Road is now open to the West by Government bores.

Apply—

DALGETY & CO. Ltd.

BRISBANE, Q.; PERTH, W.A.



"MOOKI ROTHERFIELD"
Now in use at Mooki Stud

R. R. DANGAR.

Mooki Springs Shorthorns

**HIGH-CLASS STUD and
HERD BULLS FOR SALE.**

APPLY **THE MANAGER,**
Mooki Springs, Quirindi, N.S.W.

The Nyingay Shorthorn Stud

THE PROPERTY OF
ROY SIMSON, Mungadal, Hay, N.S.W.

This stud was formed in 1902, and has been continuously selected for the production of sorts that are robust and deep fleshed.

**Stud and selected bulls usually
— for sale; also heifers. —**



NYINGAY SUMMERTON 7TH (Grass-fed). One of the stud sires.



ZARETAN DUKE OF DERRIMUT 22nd.
Purchased at the 1917 Sydney Royal Show for 460 guineas, and is now used in the stud.

GRAMPIAN HILLS SHORTHORN STUD

The Property of A., R., and F. BOWMAN,
Grampian Hills, Bunnan, New South Wales.

This stud was started in the early forties, and its purity has been maintained ever since by the use of the best bulls procurable.

At the Sydney Royal Show, 1918, Grampian Duke of Derrimut 6th was sold for 950 guineas.

STUD BULLS & COWS & HERD BULLS FOR SALE.

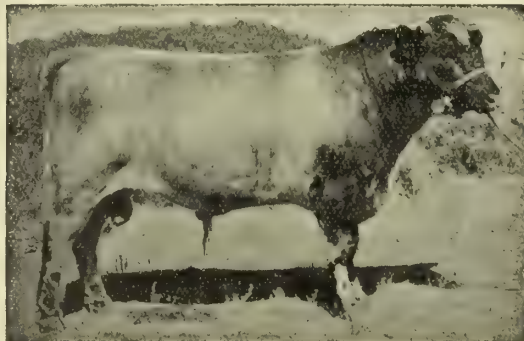
For full particulars apply to

A. BOWMAN, 279 George Street, Sydney,
or to the Manager, Grampian Hills, Bunnan.

THE JERULA SHORTHORN STUD

THE PROPERTY OF
COLIN CAMPBELL, Jerula, near Cowra, New South Wales

THE COWS of this Stud have been bred up from the Stud of the late **JOHN LEE** of Bathurst, and have been successful prizetakers.



NYINGAY WIDE 5th (at 23 months). Realised 400 gns. R.A.S. Sydney Sales, 1916.

Purchased by Mr. Colin Campbell, of Jerula, Cowra, N.S.W.
Bred by Mr. Roy Simson, Mungadal, Hay, N.S.W.

R. C. FIELD

Westfield

Westbury

Tas.



Shorthorn Stud

Founded on pure stock purchased from the Van Diemen's Land Co. about 1840. Only best blood used since.

STUD AND HERD BULLS FOR SALE.

Belmont Park Stud

RED POLLED CATTLE

Herd established 1891.

Stud bulls, heifers, and herd bulls for sale.

All herd bulls are pure bred.

Price, from 35 guineas.

Inspection invited.

Apply—**Philip Charley, Richmond, N.S.W.**



Honingham Astrologie (imp.) 10,303.

COLLENDINA SHORTHORNS.

The Property of Henry Hay & Son.



Foundation

Cows

purchased

from

Bolinda Vale.

Valuable

Young

Stock

for

Sale.

COLLENDINA DUCHESS OF DERRIMUT 21st.

By Collendina Duke of Derrimut 11th out of Collendina Duchess of Derrimut 6th.

COLLENDINA CORRIEDALES

Pure Corbett Blood.

(Registered Flock No. 12, Australian Corriedale Sheepbreeders' Association.)

For particulars apply—**HENRY HAY & SON, Collendina, Corowa, N.S.W.**

AVISFORD PARK STUDS, HERDS & FLOCKS

England.

The Property of E. C. FAIRWEATHER, Esq.



SUSSEX GOALKEEPER 34365. Bay, 17 hands, foaled 1915.

PEDIGREE DAIRY SHORTHORNS.

The herd includes the best Dairy Shorthorn families in existence. Only cows giving a minimum of 8000 lb. retained; among these is Leazow Barrington, purchased at Attwater's sale for 1100 guineas, the record price for Dairy Shorthorns. Daily milk records checked by D.S.A.

The Stock Bulls from heavy milking strains are:—

- (1) Active Lad 134511 (Grenfell's), sire Waterloo Firebrand 123518 (Potter's), dam Active Lass.
- (2) Apley Record Rosador 134663 (Perkins), sire Puddington Rosador (Sanday), dam Clarence Brown 12th.
- (3) Thornby Peer, Vol. (Wills), sire Thornby Pioneer 133922, dam Gladys Rose 12th.



TICEHURST NOBLEMAN 2nd.
1st Prize at The Official Spring Show of Sussex Cattle, 1920.

PEDIGREE SOUTHDOWN SHEEP.

The Southdown Flock is registered and individually numbered. It is unexcelled for type, character, and merit, and bred the Royal and Chichester Champions of 1919.

At the R.A.S.E. Show, Cardiff, 1919, five classes were exhibited and five First Prizes won, in addition to the Champion and Reserve Champion.

PEDIGREE LARGE WHITE AND LARGE BLACK PIGS.

The above Studs, Herds and Flocks are under the care of the most experienced managers in each department. Perfect health is a first consideration; every animal on the Estate has been selected or bred for the further improvement of their respective breed generally, and the Estate Stock in particular. Young Stock of all above for sale. Inquiries solicited; inspection invited.

Station—Barnham Junction, L.B. & S.C.R.

Apply—THE ESTATE OFFICE, AVISFORD PARK, near ARUNDEL, England.

PEDIGREE SHIRE HORSES.—Stud Horses.

Boro' Draughtsman 34567, sire Warton Draughtsman 27895, dam 72776 Towthorpe Cloudy. Purchased in 1918 at Edgcote sale at the highest price of the year.

Sussex Goalkeeper 34365, sire Champion Goalkeeper 30296, dam 62037 Sussex Plum. Purchased at Newmarket Shire sale at top price in the sale. 3rd in strong class, S.H.S. Show, 1920.

This Stud, besides the above Stallions, possesses others of the best breeding in the country, and the Brood Mares are representative of all the best Shire families.



BETSY GREY 99791.
Winner of numerous prizes, including 2 Firsts, Dairy Show 1919, giving an average of 61 lb. during the Show.

PEDIGREE SUSSEX BEEF CATTLE.

The ideal breed for Argentina, South Africa, and wherever hardiness and robustness of constitution are required.

The Sussex Herd was formed mainly by the purchase of the best cows at the famous Lock Dispersal Sale, and comprises Betsy, Heedless, Darkie, Beauty, Milmaid, and other prize-winning strains.



GROONGAL STUD, N.S.W.

The property of R. S. FALKINER.

English Leicesters Shorthorns.

For particulars apply—
The Manager.

Telegrams:
GROONGAL, CARRATHOOL.

Postal:
GROONGAL, S.W. RAILWAY, N.S.W.

BAROONA SUFFOLK PUNCHES

Known all over Australia.

Colts rising 3 years for sale.

Apply:—The Manager, BAROONA, WHITTINGHAM, N.S.W.



BAWDSEY VOLUNTEER.

Bred by Sir Cuthbert Quilter, Bart., M.P.
Champion Royal Sydney Show. 1921.



DEVON CATTLE

Having regard to the great increase in the size of these Cattle their marvellous constitution, beef producing and improved milking qualities, they have become the best ranching cattle and most suitable for export.

Shows and Sales of Devon Bulls are held by the Society in February and October annually

For all particulars and Herd Book, and for Register of Animals for sale, price 2/-, apply to the Secretary of the Devon Cattle Breeders' Society—

JOHN RISDON, Wiveliscombe, Somerset
ENGLAND.

PEDIGREE DRAUGHT HORSES

The Widgiewa Stud,

NEW SOUTH WALES,

The Property of
F. S. FALKINER & SONS LTD.,

is the largest stud of pedigree draught horses in the Commonwealth.

The mares have been carefully selected without regard to cost, and special attention has been paid to their soundness and breeding.

The imported sires **The Admiral** (Imp.) and **Federation** (Imp.) have been used in the stud. **Baron Belmont** was imported from Scotland in June, 1911, to replace The Admiral.



**WIDGIEWA ROSEMONT.—3-YEAR-OLD
3-YEAR-OLD CLYDESDALE STALLION**

Bred by F. S. Falkiner & Sons Ltd.

Sire, **BARON BELMONT** (Imp.) (C.S.B. 13973.)
Dam, **ROSEBUD**, by Lord Dundonald (Imp.)

**A Number of Colts and Fillies
are always For Sale.**

F. S. FALKINER & SONS Ltd., Boonoke North, Widgiewa Siding, N.S.W.

A limited number of approved mares taken to Widgiewa stallions.

The first annual sale of fifty of Thomson's famous champion imported Clydesdales from their Wai-Rongoa stud eventuates at Dunedin early in 1922. Full and fresh information as regards soundness, pedigree, prize winnings, colour, etc., has appeared in every issue of our publication since September, and further information continues in every issue right up to the date of the sale. Look up the past information, and that which is to follow.

There is no reserve.

The Cannobie Lea Aberdeen-Angus Herd

Founded from one of the best strains and noted for constitution.

Orders can now be booked for Calves (Period 1920).

Inspection Invited. Homestead situated 5 miles from Palmerston North.

J. F. KNIGHT, Newbury, Palmerston North, N.Z.

AKITIO ABERDEEN ANGUS STUD

Founded on stock purchased from
Messrs. Handyside, Roberts & Coy.

A bull calf was recently imported from Scotland at
a cost of one thousand guineas.

F. ARMSTRONG,
Akitio, N.Z.



MOOSE II (imp.), 5 years.

The Gwavas Herd of Aberdeen-Angus Cattle

NEW ZEALAND

The Property of Mr. A. S. G. Carlyon.



Stud Bull, Quality of Maisemore (Imp.)

ADDRESS:

The Manager, Gwavas Station,
Tikokino, Hawkes Bay, N.Z.

Telephone and Railway: Waipawa.

This herd, which is noted for good constitution and freedom from disease, has lately been improved by importations from the herds of Lord Rosebery; Kerr of Harviestoun; Kennedy of Doonholm; Cridlan of Maisemore Park, Gloucester; and Elliott of Duns.



Stud Cow, Pure Pride of Dalmeny (Imp.)

SOUTH AUSTRALIAN MERINO RAMS

Being in touch with all the principal breeders
—we are in a favourable position to render
every assistance to intending purchasers:

Elder, Smith & Co. Limited

Stock and Station Agents, Wool Brokers, &c.,

ADELAIDE.

Stud Flocks of South Australia



TYPICAL SOUTH AUSTRALIAN RAM.

renowned for constitution,
size and heavy cutting
fleece of high-class warp
wool.

Sheepbreeders requir-
ing Rams or Ewes from
any of the South Australian
Stud flocks are invited to
communicate with the
undersigned, who can place
expert service at their dis-
posal and afford special
facilities for shipment
through their Branches at
all seaports.

DALGETY & COMPANY LIMITED, ADELAIDE.

Kent or Romney Marsh Sheep

The hardiest and best grazing mutton and wool sheep of Great Britain. Successfully acclimated wherever they are required.

Annual Ram Show and Sale

Held at Ashford, Kent, in September.

Descriptive pamphlet, list of Breeders and all information from—

W. A. Ball, 12, Hanover Square, London, W.1.

The Hoaden Court Flock and Herd

ROMNEY MARSH SHEEP

RED POLLED CATTLE

FIRST PRIZE FLOCK, CLASS III, 1920

Mr. H. T. GREENSTED, Hoaden Court, Ash, Canterbury, Kent, England

Breeds and owns a **Romney Marsh Flock**, with full individual pedigree kept naturally without pampering, resulting in the production of sound vigorous, thrifty sheep, having that most desirable of all qualities—sound staple and uniform fleeces. Its notable successes in 1919 were 2nd prize for Small Flocks in the 1919 Flock Competition, and 4th for Yearling Rams at Ashford, 1919.

A Herd of **Red Poll Cattle**, a breed unrivalled for the dual purpose of Milk and Beef Production, is also kept at Hoaden, and specimens of the best lines of breeding are to be found there.

Rail Stations:—Adisham, Grove Ferry, or Sandwich, S.E. and Chatham Railway. Telegrams, Hoaden, Ash, Canterbury.

The Hoo Romney Marsh Flock

CHAMPION FLOCK 1920 FLOCK COMPETITION.

Founded 1853.

Registered Vol. 1.

Maintained entirely on commercial lines, no flock affords a better selection of thoroughly reliable breeding stock. Yearly drafting for over half a century has produced a fixed and most desirable type, the more prominent characteristics being great width and spread of carcase, even and uniform fleeces, and a general flock likeness, with most typical and well-covered heads. The best sires procurable have invariably been used, and the result is that, once a purchaser of Stud Sheep, always a purchaser. Apply the owner, Walter Miskin, White Hall, Hoo, Rochester, Kent, England. Railway Station, Sharnal-street. Telegrams, Hoo, Rochester. Telephone, 10 Hoo.

Kent or Romney Marsh Sheep.

The Adisham Court Flock

FOUNDED 1916.

REGISTERED 1917.

Property of **Mr. O. C. MILLEN, Adisham Court, Canterbury, Kent, England.**

Descended from the choicest strains of prize winning Blood, reared naturally, none excel it for hardiness, typical character, weight of bone and evenness of fleece. Its 1918 and 1919 records are unexcelled. At Ashford, the principal Breed Exhibition and Sale of the year, in 1918 it won 2nd Yearling Ram R. Champion and 4th best pen of five, and in 1919 2nd best group of five. Its sale averages were—1918, £159/15/-, top price 300 guineas; 1919, £63/2/4, top price 130 guineas. The 1918 Yearling and R. Champion was resold in Buenos Aires for £550.

Apply Owner, as above.

Cables and Telegrams: Wingham.

The Nash Court Romneys

Registered Flock No. 192.

A typical Flock representative of the choicest strains of blood, mainly those associated with the well known names of Macknade, Quested, Syndale Farmer and Otham Flocks.

Selections have been exported to Argentine, Uruguay, Chili, Falkland Islands, Japan and India.

Reared naturally and unpampered, the Sheep are hardy and sound in constitution.

Apply the Owner—

MR. R. G. TAYLER,

Nash Court, Margate, Kent, England.

RYELAND SHEEP

One of the oldest breeds of the British Isles, and the least crossed.

Leading Characteristics

Character and Symmetry. Hardy constituted. Mutton and Wool of the finest quality. Early maturity. Freedom from foot rot. Average weight of fleece washed 7½ lbs. Average dead weight of yearling at 12 months, 70 lbs. Special attention paid to export trade.

Write direct to the Secretary:—

W. H. WOODCOCK,

St. Cuthbert's,

Whitecross Road,

Hereford, ENGLAND.

LUDDENHAM COURT ROMNEYS

Founded 1899.

Winners of

Flock No. 122.

CHAMPIONSHIP FOR EWE FLOCK, 1919.

A Flock of Choice Breeding and merit as proved by above Championship won by ENTIRE FLOCK, judged on the farm in NATURAL BREEDING CONDITION.

INDIVIDUAL PEDIGREES. SOUND CONSTITUTION. TYPICAL FLEECE.

Apply

ASHLEY STEVENS,

Station Telegrams:—FAVERSHAM.

LUDDENHAM COURT, FAVERSHAM KENT.

ROMNEY MARSH SHEEP

WITTERSHAM FLOCK.

Founded in 1829.

Registered No. 24, Vol. 1-4, and No. 160, Vol. 16.

Owned by Lieut-Col. John Body, Wittersham Court, Wittersham, KENT, this is one of the oldest and soundest flocks of the breed. Has three times competed in the Ewe Flock Competition. In 1911 and 1913 it was placed second in the class for flocks containing between 200 and 500 ewes; in 1920 it was placed first in same class, and was reserve number for the Coronation Challenge Cup offered for the best flock of Romney Marsh ewes in England.

Cables and Telegrams:—JOHN BODY, WITTERSHAM.

Railway Station:—APPLEDORE.

THE LEADING LIVE STOCK AGENTS AND EXPORTERS IN ENGLAND are

ALFRED MANSELL & CO., COLLEGE HILL, SHREWSBURY, ENG.

We are the largest exporters of **BRITISH PEDIGREE LIVE STOCK**,
and are therefore in a position to buy on the best terms.

WE CAN SUPPLY ALL BREEDS OF HORSES, CATTLE, SHEEP AND PIGS.

Our old-established Firm have supplied animals for the foundation of Herds and Flocks in all the stock producing countries in the world, and have regularly supplied the principal breeders in maintaining them with new blood when required.

SHIPMENT AND INSURANCE.—All arrangements for Shipping Stock including Freight, Fodder, Attendance, Insurance, etc. undertaken at Lowest Market Rates. Our Shipping Department makes the Shipping arrangements for several prominent Live Stock Exporters and does the whole Live Stock Insurance of one line of steamers.

The Highest References Given and Required.

ENQUIRIES INVITED.

Cables: "PEDIGREE," Shrewsbury, England.

STUD STOCK SPECIALISTS.

All Auction Sales, in which
we hold many Records, are
conducted by Principals.

BADGERY BROTHERS LTD.

SYDNEY, N.S.W.

Dont Forget !!! To send us your draft for the next
Royal Sydney Sales.

In touch with All Leading Breeders, and can supply Any Breed of Sheep or Cattle.

Write **BADGERY BROTHERS LTD.****SYDNEY.**

CRAMSIE & LETHBRIDGE LTD.

Stock, Station, Land and Financial Agents,
Fat Stock Salesmen.

Stock Sale Days:—

Flemington: Sheep & Cattle, Monday & Thursday.
Homebush Bay: Pigs, Tuesday; Calves, Wednesday.

Our Principals personally attend to all Stock consigned to them.

We are Property Salesmen, and invite particulars of same, and correspondence from all Agents and Principals.

Head Office: 16 O'CONNELL STREET, SYDNEY.

Branches—Wee Waa and West Wyalong.

SOUTH DEVON SHEEP

Equal to any British Breed in Size of Carcase, Weight of Wool, and
Length of Staple.

Unrivalled for crossing purposes to secure increased depth of flesh, weight of carcase, together with heavier fleeces and increased length of staple. Hardy and full of constitutional vigor, with remarkable aptitude for early development. Two hundred registered flocks to select from.

Ram Sales held annually at Totnes and South Brent, Devon, and Liskeard, Cornwall, in August; and at Truro in September

List of Flockowners and full particulars from—

W. W. CHAPMAN, The Secretary,

Mowbray House, Norfolk St., Strand, London, W.C.,
England.

DALGETY & COMPANY LIMITED

SYDNEY.

STUD STOCK SALESMEN.

**Pedigreed Cattle of all Breeds
Merino, Corriedale & British Sheep**

Being in constant touch with all the leading Breeders of the Commonwealth and New Zealand we are in an exceptionally favourable position to secure Stud Stock for intending purchasers.

SOUTH AUSTRALIAN MERINO STUD RAMS

We are in touch with all the leading Stud and Flock Masters in South Australia and can supply particulars of any class of sheep required.

We invite enquiries and will be pleased to inspect, report, or select stock for clients.

BENNETT & FISHER LIMITED,

LIVESTOCK SALESMEN.

WOOL AND PRODUCE BROKERS, etc.

CURRIE STREET, ADELAIDE.

BRISBANE STUD STOCK SALES

Dalgety & Company Limited

will conduct their Annual Sale of

STUD CATTLE AND STUD AND FLOCK SHEEP

in August, 1921.

(Brisbane Exhibition Week). Exact dates to be named later.

CONSIGNMENTS INVITED.

Dalgety & Company Limited, Brisbane,

STOCK AND STATION AGENTS, WOOL AND PRODUCE BROKERS.

TO STUD SHEEP BREEDERS.

A. L. MORRISON, with many years' experience in practical station management, stud sheep breeding and classing, under the following well-known breeders of high-class Merino sheep—Sir Saml. McCaughey, Messrs. J. S. Horsfall and F. S. Falkiner & Sons Ltd.—is prepared to undertake the classing of stud and station flocks, to furnish advice in regard to mating and the selection and purchase of stud Merino sheep.

Properties inspected and reported on, valuations made for probate and other purposes.

Address:—A. L. MORRISON, C/O CO-OPERATIVE WOOL & PRODUCE CO. LTD.,
3 BENT STREET, SYDNEY.

Great Dispersal Sale of Blair Athol Stud Shorthorn Herd

Messrs. DALZIELL BROS., of Hunterville, North Island, New Zealand, will SELL
at the Homestead, adjoining the Railway Station of Mangaonoho, main Trunk Line,

104 HEAD OF CATTLE

comprising:

40 Breeding Cows, 4 yrs. and over.
14 Breeding Cows, 3 yrs.
9 Heifers, 2 yrs.

6 Heifers, yearlings.
22 Heifer Calves.
1 Bull, "Diamond Fairy," 7 yrs.

1 Bull "Knapdale Justice," 3 yrs.
4 Bulls, yearlings.
7 Bull Calves.

Date of Sale, 1st June (Wednesday), 1921,

Commencing at 12 o'clock noon.

Auctioneers: DALGETY & Co. Ltd.

Catalogues on application DALGETY & Co. Ltd.
all branches, Australia.

Australian Sheepbreeders' Association (Melbourne).

43rd Grand Annual Show

JUDGING DAY—1ST AUGUST
SHOW DAY — 2ND AUGUST

Substantial Prizes for Merinos (Fine, Medium, and Strong
Wool, and Small Owners' Section).

British Breeds, Corriedales and Polwarths.

Entries Close 7th July, at 6 p.m.

Prize Lists, Entry Forms, and all particulars from

LESLIE SMITH, Secretary, "The Rialto," Collins Street, Melbourne.

The Royal Agricultural Society of N.S.W.

**ANNUAL SHEEP SHOW,
30th June, 1st and 2nd July, 1921.**

ENTRIES CLOSE—

Sheep Saturday, 4th June, 1921
Dogs, and Sheep Dog Trials ... Wednesday, 15th June, 1921
Wool Classes Wednesday, 15th June, 1921

Prize schedules and entry forms on application.

H. M. SOMER, Secretary,
Ocean House, Martin Place, Sydney.

Wednesday, 3rd August, 1921.

THE MELBOURNE STUD SHEEP SALES

MERINO

Conducted by

BRITISH BREEDS

Goldsbrough, Mort & Co. Ltd.

Will be held in the Company's Central and Spacious Warehouses, Bourke St., beginning at **TEN O'CLOCK** precisely,
when they will offer a very choice **STUD RAMS and EWES** from the principal breeders of the
and representative selection of various States.

Early entries of sheep for sale are invited.

Entry forms, and any other information desired, may be had on application to—

GOLDSBROUGH, MORT & COMPANY LIMITED, MELBOURNE.

Thursday, 4th August, 1921.

The MELBOURNE ANNUAL STUD SHEEP FAIR

Thursday, 4th August, 1921.

POWERS, RUTHERFORD & CO. will hold their **FIFTY-FOURTH ANNUAL FAIR** of

HIGH-CLASS STUD SHEEP

from the leading breeders in the Commonwealth, in the extensive WAREHOUSES of YOUNGHUSBAND LTD., Kensington, on **THURSDAY, 4th AUGUST**. Sheep consigned to **POWERS, RUTHERFORD & CO.** can be trucked direct into the stores and buyers are enabled when necessary to despatch their purchases by rail from the stores without any further trouble or expense.

ENTRIES NOW BEING RECEIVED.

POWERS, RUTHERFORD & CO., Pure Stock Salesmen, Melbourne.

Moreheads Limited

Woolbrokers, Stock and Station Agents,
BRISBANE, QUEENSLAND.

We can offer a wide selection of Pastoral Properties in all parts of Queensland.

NOTE.—We Specialise in Stud Stock.

McPHIE & CO.

CATTLE, SHEEP, AND PROPERTY SALESMEN, &c.

TOOWOOMBA, Branches at **PITTSWORTH, OAKEY, QUEENSLAND.**
DALBY and CHARLEVILLE.

Calliope Stud

Wilson & McDouall Ltd., Calliope, Queensland.

Pure Shorthorn Stud & Herd Bulls for Sale

Bred on Red Water Country

The Cows in the Stud were selected from such noted breeders as the late A. A. Dangar, Mooki Springs; Trustees J. C. Hooke, Dungog, N.S.W.; J. Burgess, Canning Downs South, and several noted herds in Victoria.

The herd Bulls are bred at Calliungal, which stud was formed in 1906 from Cows direct descendants of the Studs of the old A. A. Coy., Gloucester; Bell, Pickering; A. A. Dangar, Mooki Springs; and Trustee J. C. Hooke, Dungog. The purity has been maintained ever since by the use of the best bulls procurable.

Our object is to breed Shorthorns combining robust constitution with depth of flesh and quality.



COUNT GOLDIE (imp.)

No. 135952, Vol. 63, C.H.B. Sire Count Benedict. Now in use in the Calliope Stud.

Apply to Manager—CALLIOPE STATION, CALLIOPE, Queensland.

ALLAN STEWART LTD.

15 ST. JOHN STREET, LAUNCESTON, TASMANIA.

Wool Brokers, Stud Stock Salesmen & Land Agents.

We Specialise in all Stud Stock.

CATTLE.—Ayrshires, Jerseys, Shorthorns, Devons, Angus.
SHEEP.—Lincolns, Leicesters, Southdowns, Romney Marsh, Corriedales, Border Leicesters.

STOCK FOR PRIVATE SALE. PROPERTIES, FARMS to PASTORAL ESTATES.

Catalogues on Application.

For Sale by Public Auction.

“WEEWONDILLA”

DALGETY & CO. LTD. & GORDON GRAHAM, COLDHAM & CO., BRISBANE (under instructions from the Vendors) will offer by PUBLIC AUCTION (through their Auctioneer), at the **GRESHAM HOTEL, BRISBANE, on**

THURSDAY, 7th JULY at 11 a.m.

The Property known as “WEEWONDILLA”

situated about 59 miles from LONGREACH, and about 14 miles from MUTTABURRA, with which it is connected by telephone, comprising:—

GRAZING FARM, No. 25, Por. 14V, Par. Rutilus, 19,600 acres—40 years from 1-7-89
Rent, 1½d. per acre per annum.

GRAZING FARM, No. 23, Por. 12V, Par. Rutilus, 20,000 acres—40 years from 1-1-90
Rent, 2d. per acre per annum. Total, 39,600 acres (more or less)

(These Rentals are due for Re-Appraisalment).

The Country is described as **FIRST-CLASS SHEEP COUNTRY**, being principally Open Mitchell Grass Downs, timbered with Gidyea, Boree, and Whitewood. Watered by Artesian Bore and about 30 miles of Bore Drains, Bradley's Creek, three overshot Dams, and filled by bore streams. Five miles single frontage to the Thompson, and a double frontage to Landsborough Rivers. “Weewondilla” is well improved, being Fenced and subdivided into 26 Sheep Paddocks, with good Homestead, Cart Shed and Store, Woolshed, Wool Room, Sheep Dip, Drafting Yards (with water laid on to the yards); also an outstation Hut. With the property will be offered Household Furniture and a complete plant for working the property, including a 1914 model Buick Car. Also the following stock:—15,700 (more or less) Mixed Sheep, pure Bundemar Blood, to be shorn June, 1921, including 5300 Ewes lambing April/May. These Sheep have been carefully culled for the last eleven years, high-class Rams only having been used. 300 (more or less) Mixed Cattle, 7 (more or less) Horses.

TERMS—Half cash, the balance in four equal annual instalments, bearing interest at 6½% per annum, payable half-yearly.

For further particulars apply to—

Dalgety and Co. Ltd., Brisbane and all branches

or

Gordon Graham, Coldham and Co., Brisbane

Agents in conjunction.

The new book for the Sheepman

Compiled by Mr. E. H. Pearse, Editor of “The Pastoral Review,” who has for years been in close touch with sheepmen and edited articles and letters written by practical men for “The Pastoral Review” on all phases of sheep and station work.

Written and arranged with a view to continuity, each chapter dealing exhaustively with the particular subject in hand. Chapter follows chapter in a natural sequence.

Entitled “**Sheep, Farm and Station Management**,” and is published in a handy volume of some 400 pages, fully illustrated, well bound in cloth, and with no advertisements. A very complete index facilitates reference.

Published by

THE PASTORAL REVIEW PTY. LTD.

Melbourne, Sydney and London

At 25/-

Now in Stock.

ANNUAL STUD SHEEP SALES

Stud Rams and Ewes.

THE VICTORIAN PRODUCERS' CO-OPERATIVE CO. Ltd., Pure Stock Salesmen, 589-605 Collins St., Melbourne, will offer on behalf of the Leading Breeders of Victoria, South Australia, New South Wales and Tasmania, Merino and British Breeds of Sheep in our Wool Stores at Macaulay, 1½ miles from Melbourne, on

WEDNESDAY, 8th AUGUST, 1921.

Victorian Producers' Co-op. Co. Ltd.
589-605 Collins Street, Melbourne.

Stud Stock.

The Official Organ of the "Australian Longwool
Sheepbreeders' Association,"

and

The Official Organ of the "Stud Beef Cattle
Breeders' Association of Australia."

Latest Stock Returns.

AUSTRALIA AND NEW ZEALAND.

	SHEEP.		CATTLE.		HORSES	
	1919.	1920.	1919.	1920.	1919.	1920.
N. S. Wales ...	33,465,534	29,901,701*	2,852,047	2,854,877*	577,183	496,403*
Queensland ...	18,220,985	17,379,332	5,786,744	5,940,433	759,726	731,705
Victoria ...	15,778,902	14,422,745	1,596,544	1,631,120	523,788	513,500
S. Australia ...	6,625,184	6,014,565	342,768	349,562	269,255	264,901
W. Australia ...	7,183,747	6,697,951	943,847	880,644	180,094	174,919
Tasmania ...	1,841,924	1,781,425	218,234	214,442	41,221	39,452
N. Territory ...	58,620	8,811	570,039	610,534	31,436	35,839
Total Aust.	83,174,896	76,206,530	12,310,223	12,481,612	2,382,703	2,256,719
New Zealand ...	25,828,554	23,914,506	3,035,478	3,101,945	363,188	346,407
Argentina ...	—	45,309,419	—	27,392,126	—	8,323,815

N. S. Wales returns in each case are to 31st Dec., 1919, & 31st Dec., 1920
South Australia " " " to 30th June, 1919, & 30th June, 1920
Q. & W.A. " " " to 1st Jan., 1919, & 1st Jan., 1920
Victorian & Tas. " " " to 1st Mar., 1919, & 1st Mar., 1920
N. Territory " " " to 1st Jan., 1919, & 1st Jan., 1920
New Zealand—Sheep returns only are to 30th April, 1919, & 30th April, 1920.
Cattle and horses are to 31st Jan., 1919, and 31st Jan., 1920.

* Estimated.

Forthcoming Shows, 1921.

MAY.

24-26—Pietersburg, S. Africa. 31-June 2—Pretoria, S. Africa.
31-June 1—Bulawayo, S. Africa. 31-June 4—Bath & West at Bristol,
31-June 1-3—Dunedin Winter, N.Z. G.B.

JUNE.

8-10—Hereford and Worcester, at Hereford, G.B. 21-24—Palmerston North National Dairy, N.Z.
9-11—Richmond Horse, G.B. 23-25—Rockhampton, Q.
16-17—Gladstone, Q. 28-July 2—English Royal at Derby.
20-22—Olympia Horse, London, G.B. 30-July 2—Sydney Sheep.

JULY.

4—Sydney Ram Sales. 26-29—Highland at Stirling, Scotland, G.B.

AUGUST.

1-2—Melbourne Sheep. 10-11—Balmoral, Vic.
3-4—Melbourne Sheep Sales. 17-18—Hamilton Sheep, Vic.
3-4—Suffolk Sheep at Ipswich, G.B. 23-25—Wagga, N.S.W.
8-13—Brisbane National. 30-31—Corowa, N.S.W.
9-12—Royal Dublin Horse, Ireland. 31—Forbes, N.S.W.
10-11—Ballarat Sheep, Vic.

SEPTEMBER.

6-8—Young, N.S.W. 17-24—Melbourne Royal.
13-14—Jovra, N.S.W. 20-22—Temora, N.S.W.
13-17—Arlside Royal. 28—Deniliquin, N.S.W.
14-15—Cockatoo, N.S.W. 29-30—Horeham, Vic.
15-17—Singleton, N.S.W. 29-30—Yarrawonga, Vic.

OCTOBER.

5-6—Hay, N.S.W. 12-13—Hamilton, Vic.
11-13—Bandigo, Vic. 18-19—Narandera, N.S.W.
11-12—Euroa, Vic. 26-27—Warrnambool, Vic.

NOVEMBER.

9-10—Ballarat, Vic. 15-16—Kyneton (Grand National), Vic.

Advertising Stud Stock.

Although the fact that it pays to advertise will be readily acknowledged by almost everybody, it is remarkable how many folk succeed in persuading themselves that it does not apply to them personally. One sees this cropping up in all sorts of businesses, and perhaps not least amongst stud stock breeders. Why it should be so is rather difficult to understand, for while stud breeding is an art or profession, selling the resultant stock is a business proposition pure and simple, and ought to be treated as such. When discussing the question with breeders one often comes across the argument that "my stock are so well known that they need no advertising," or that "I can easily sell all that I can breed amongst my neighbours." Granted, but the fact still remains that it pays to advertise. It is not necessary to go into an abstruse discussion to prove this, we just refer readers to the illustrated stud section of this or any issue of "The Pastoral Review." There will be seen pages, half pages or quarter pages devoted to particulars of stock for sale, and the breeding of many of the most noted sheep and cattle studs in Australia and New Zealand, and even Great Britain. Here are the names of herds and flocks that have become household words, and yet the owners find it pays to keep on spending money in advertising.

No seller of a commodity, particularly of stud stock, can afford to ignore a market or pass by a possible buyer. A man may be able to get rid of all he can produce in his own neighbourhood, but if he can widen the demand he will, all other things being equal, be able to increase his price. The old, old saying that a prophet is not without honour except in his own country is too often true as regards a stud breeder, and the only way to overcome the, shall we call it prejudice, is to sell outside. Once a man starts doing that his neighbours will appreciate him much better, and values surely go up.

The success of the stud advertisements in "The Pastoral Review" may be attributed to three causes, viz., the general excellence of the stock offered, the wideness of the paper's circulation, and the manner in which the advertisements are displayed and printed. Even as Australia is pre-eminent in producing certain types of stock, so is "The Review" without rival for this branch of publicity. Apart from the tremendous Australian and New Zealand circulation, it goes amongst the leading sheep and cattle men throughout Africa, South America, and other overseas countries. The advertisements act as the connecting link between the seller and buyer here in Australia or elsewhere, and enable business to be transacted between parties who never come in personal contact with each other. In a nutshell it is this that makes the advertising so profitable to the breeder. A man with good stock, advertised in a medium like "The Pastoral Review," in an honest, straightforward manner, will prove to his own satisfaction at all events, that it pays to advertise. Let the stock be good, the medium good, and the result must be good.

A recent issue of the Chicago "Breeders' Gazette" contains a list of the world's record prices paid for the different breeds of cattle. From this it appears that, with the exception of Shorthorns and one or two other isolated cases, every record has been created at sales held in the United States. Anybody who sees American stock papers will know that stud breeders in that country are very large advertisers, which goes to prove the above contention that there is a close connection between the liberal use of printer's ink and satisfactory sales.

Hereford Herd Book.

English Secretary to visit Australia.

Our London correspondent cables us that Mr. W. G. C. Britten, secretary of the English Hereford Herd Book Society, has accepted the Australian Society's invitation to visit Australia this winter to confer with the council on herd book matters. Mr. Britten will also judge the Herefords at the Brisbane Royal Show in August next.

South African Shows.

Bloemfontein.

A record number of entries was received for the Central Agricultural Society's annual show, opened on 12th March. As is usual at Bloemfontein, Friesland cattle made a splendid display, all classes being strong, but particularly so those for females. The Shorthorn sections were not quite so well supported as at previous shows, although some very fine animals came forward. Herefords were disappointingly few in numbers, and the same applies to Aberdeen-Angus exhibits. Red Polls and Devons formed strong classes. There was a gratifying increase in the number and quality of the Merino sheep shown.

The championship for Friesland bulls went to Mr. W. J. B. Stone's Bloemhof Zondag, the first prizewinner in the aged class, the reserve champion being Mr. R. J. Baker's Colonies Plaats Pel Reintje. Mr. H. Cloete, with De Beste of Batavia, won the female championship. For the Roderick trophy, valued at 100 guineas, for a bull of any age, judged on four of his progeny, to be won three times, the Golden Valley Citrus Estates was placed first.

The exhibits sent in by Mr. A. V. Morum, of Queenstown, were a feature of the Shorthorn division. That gentleman won both championships, reserve championships, eight firsts, two seconds, and one third, all with a total exhibit of eleven animals. Other successful exhibitors were the Smartt Syndicate Ltd., Mr. R. P. Kingwill, Mr. J. H. Diesel, Commodore Talbot-Ponsonby, Messrs. Frasers Ltd.

Champion honours for Red Poll males went to Messrs. W. J. Diesel and Sons, and for females to Smartt Syndicate Limited. The Devon bull championship went to Mr. J. O. Southey, and the premier honours for females to Mr. J. Fairbairn-Philip. Sir Abe Bailey, Clewer Estate, was the only exhibitor of Herefords, while Mr. J. H. Parr and the estate of late C. Stevens were the sole entrants of Aberdeen-Angus cattle.

Competition was not very keen in the fine-wool Merino classes, but the quality was of a high standard. The champion ram and ewe were sent in by Mr. F. W. Southey, of Hillmore stud, as were most of the other prize-winning exhibits. The same breeder as very successful in the strong-wool classes, annexing both championships. Other breeders to send in good sheep were Mr. J. P. de Wet, Mr. J. C. Faure, and Mr. H. C. Haarhoff. In the section devoted to Rambouillets and Wanganelias, Messrs. H. L. Southey, Carnie C. Vermaak, and R. L. Holmes were prominent.

The classes set apart for sheep bred in the Free State were well supported, and the quality reflects considerable credit on stud masters. Mr. R. L. Holmes won the championship for rams, and Mr. D. J. du Plessis for ewes in the Wanganelia section, Mr. W. K. Van der Merwe the ram championship, and Mr. H. C. Haarhoff the ewe championship in the section for Tasmanian and allied types. Lack of space makes it impossible to mention other successful exhibitors.

Johannesburg.

The Witwatersrand Agricultural Show was held between 23rd and 28th March, and despite threatening weather proved a great success. Most of the cattle classes were well supported, but the sheep made a poor show numerically, the only Merino breeders exhibiting being Dr. E. G. Goddard and Mr. H. C. Haarhoff.

Full details of the awards have not come to hand, but it may be mentioned the supreme cattle championship of the yard went to Messrs. Anderson Bros.' Shorthorn bull, Golden Star, the first reserve being Mr. H. L. Phillips' Aberdeen-Angus Excellence of Stagenhoe, and the second reserve Mr. W. J. B. Stone's Friesland Bloemhof Zondag.

Messrs. H. L. Phillips, A. C. Madore, Wm. Drysdale, J. H. Clayton, Cedara School of Agriculture were amongst the principal exhibitors of Aberdeen-Angus cattle, Mr. Phillips carrying off the bull grand championship, and the Cedara School the ditto for cows. The champion Devon bull was exhibited by the Transvaal Consolidated Land Company, and the reserve by Mr. F. E. Frost. Mr. J. Fairbairn-Philip forwarded the champion cow, while the T.C.L.'s exhibit was given the reserve card.

Sir Abe Bailey carried off premier honours for Hereford bulls, and the Uitval Hereford Farm for cows. Both male and female reserve championships were won by Mr. S. F. Reynolds. Mr. A. V. Morum repeated his successes at Bloemfontein by winning the Shorthorn bull and cow championships, and Messrs. Anderson Bros. took both reserves. Mr. James T. Foster's South Devons were awarded male and female champion ribbons.

As at Bloemfontein the grand champion Friesland bull turned up in Mr. Stone's Bloemhof Zondag. The champion cow was sent in by Mr. D. P. Bennett.

Merino Breeders' Association of South Africa.

A meeting of the Council of the Merino Stud Breeders' Association of South Africa was held at Bloemfontein last March, when the secretary reported the following animals having been examined:—Rams, 60 passed, 91 rejected; ewes, 476 passed, 809 rejected. He mentioned that many inspections were undertaken at a loss, owing to the small number of sheep submitted, and advocated increasing the age of rams for inspection to thirty months. He also thought that the percentage of points required for a pass, viz., 85 per cent., was too high, as it did not leave enough margin for improvement. Dr. Goddard suggested that sheep should be examined at twenty months, and that there should be a second inspection at not less than thirty months. It was decided that the question should be put on the agenda paper for discussion at the next annual general meeting. A motion was agreed to fixing the minimum fee for inspections at £7 10s.

As regards stud sales, the secretary reported that he had interviewed Mr. Roderick, of Roderick and Co. Limited, the Bloemfontein firm of pure bred stock salesmen, who was desirous that the association should undertake the examination of all sheep entered for the August sale as stud sheep. All animals passed by the association would be sold on the first day in the Lecture Hall, as was done in the case of cattle. All other animals would be sold in their pens on the second and subsequent days. After discussion, it was agreed to advise Mr. Roderick that the association was quite agreeable to make arrangements accordingly, upon the understanding that he would notify breeders that all sheep for examination must be sent in at least two days prior to the sale, so as to give the inspector an opportunity of getting through the work.

It was resolved that the fee to be levied by the association should be £1 1s. for each ram, and 10s. for each ewe, whether the animal be passed for registration or otherwise. It was further agreed that breeders desirous of having their sheep inspected must notify Rodericks when sending in their entries, and that, in the event of entries being numerous, Mr. Roderick be asked to notify breeders to forward their animals well in advance.

In the event of Mr. G. J. Schuurman (the inspector) being unable to get through the work single handed, he was authorised to get assistance, the following names being approved in this connection:—Messrs. E. N. Roberts and A. M. Spies.

The Australian Sheepbreeders' Association.

The above association has issued its prize schedule for the forthcoming annual exhibition to be held on 1st and 2nd August at Goldsbrough, Mort and Co. Limited's Wool Stores, Bourke-street, Melbourne.

The schedule includes valuable prizes for Merinos (fine, medium, and strong wool, and small owners' section for owners of not more than 3000 sheep), British breeds (Lincolns, English and Border Leicesters, Shropshires, Southdowns, Romney Marsh, and Suffolks), Corriedales, and Polwarths. The sections for non-competitive entries of Merino sheep are again included, as is also a special prize for Merino Rams Sweepstakes. Entries for all classes close on Thursday, 7th July.

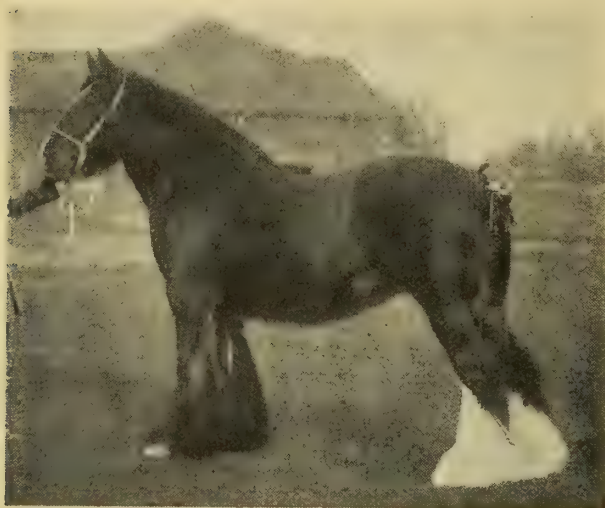
Prize lists, entry forms, and any other particulars may be obtained on application to the secretary, Mr. Leslie Smith, at the Rialto, Collins-street, Melbourne.

Shire Horses.

The 1921 spring show of the Shire Horse Society of Great Britain and Ireland will be always associated with the successes achieved by the stock bred by His Majesty the King at his stud farm, Sandringham, Norfolk. At the previous show held at Islington, the King's stallion, Field Marshal 5th, was selected for premier honours above all comers. In 1921 he successfully fought the battle over again before a second bench of judges, and once more was pitted against the same antagonist, Blaisdon Draughtsman, for the champion rosette. This dual victory places the Society's Gold Cup per-

manently in the possession of the King, who has been pleased to replace the trophy by the offer in perpetuity of a new Challenge Cup for the best Shire stallion at future London shows.

But His Majesty's success was not limited to males. In his Maid Marion 2nd he has a potential future matron of the breed. First as a two-year-old in 1920, the mare stood first among the three-year-olds of the present year's ex-



SHIRE MARE, MAID MARION 2ND.

hibits. She is a bay mare by Friar Tuck 4th (31447), and out of the registered dam Princess (68248), by Resistance (25461), and tracing back on the maternal side to the celebrated Harold (3703).

She has good feet, nice pasterns and flat bone, hair long and silky. Her action is straight and true, and set going gives a fine display.



SHIRE STALLION, FIELD MARSHAL 5TH.

Champion Field Marshal 5th comes from a long line of distinguished ancestry, his sire, Champion's Clansman, being first and champion in London in 1917, and his paternal grandsire, Childwick Champion, was a prizewinner at the Royal and London Shire shows. He is bay, 17 hands high, with the very best of feet, flat bone of grand quality, and long, straight feather. On the parade he makes a fine show, going true and well, with plenty of freedom.

Suffolk Sheep Society.

Foot and Mouth Disease.

The annual meeting of the Suffolk Sheep Society was held at Ipswich, England, in February. The report of the council stated that it was interesting to note that Suffolks again well held their own at the Smithfield Show in spite of the fact that some of the most famous flocks were debarred from showing owing to the foot and mouth disease restrictions. In the sale yard the average prices realised by ewe lambs, ewes and rams had gone up steadily each year since 1913, and the past year was no exception; whilst reports of sales from all quarters were most satisfactory. Suffolk and Suffolk cross wool had come prominently into notice during the year, topping the market at centres far from the home of the breed. Owing to the preference for wool of the Suffolk type to-day, the following points suggested by the British Research Association should be noted:—Black or grey hairs and kemps (dead hair) must be avoided at all cost; "quality," namely, the fineness (thinness), coupled with uniformity in length of the individual fibre, was most desired. Improvement could be best made by the use of rams having fleeces of the desired weight and quality, and the flockmaster's personal attention in selection at shearing time.

The president, Mr. E. G. Pretymann, M.P., referring to the recent outbreak of foot and mouth disease, said that so far as the origin was concerned he had come to the conclusion that the most feasible source of infection was that it was carried by birds in some form or other. The Board of Agriculture said that it was either birds or the wind. It was a peculiar thing that in none of the primary outbreaks, as at Martlesham, had they been able to trace the source, but in the secondary ones they could. A more isolated spot than Martlesham could not be found, and for some months prior to the outbreak nothing had gone on to the farm that could possibly have carried infection; no fresh stock and no imported material. One observed that jackdaws and starlings were constantly about the sheep troughs and bins, and they were constantly crossing the North Sea. There was no proof that it was birds, but it seemed to him to be the most likely source of infection. If it was, it was perfectly clear that they could not guard against it, and all they could do was to watch most carefully and take the utmost precaution by slaughter or isolation immediately an outbreak took place. It was obviously the best policy to slaughter, but he understood there was a power which might be exercised by the Ministry of Agriculture in an outbreak where the stock affected was of extraordinary value, and where circumstances allowed of it, to agree to isolation under local advice, because recovery nearly always took place.

Stud Stock for Peru.

The almost undeveloped rich natural resources of Peru as regards the production of meat and wool are being investigated at the hands of the Peruvian Corporation. The coat of the vicuna, llama, guanaco, and alpaca have been subjected to very thorough tests at the hands of Professor Barker, of the Leeds University, England, who, with the Peruvian Corporation's expert, Col. R. J. Stordy, gave publicity to the results of their investigation in a lecture delivered before the Royal Society of Arts in December. While the natural product of the indigenous stock is of the greatest value, the corporation sees further possibilities in combining their good qualities with those of famous British breeds, and as a result of several months' inquiry and selection a first shipment took place in February.

The s.s. "Huanchaco" sailed for Mollendo, via the Panama Canal, with a group of Shorthorn bulls, pedigree stallions and mares, 21 coops of poultry of different varieties, large black boar and gilts, 1 dozen sheep dogs, 4 shepherds and stud groom, and the following sheep:—Southdown, Shropshire, Hampshire, French Rambouillet rams, 62 Suffolk rams and 20 Suffolk ewes, also 4 Soay rams. The Suffolks were bred by Messrs. G. A. Goodchild, W. F. Paul, Webb and Sons (Combs) Ltd., Fred Slater, Sir Ernest Cassel, W. O. Jackson, S. A. Taylor, Hasler and Co., H. E. Smith, W. G. Buchanan (Wales), S. R. Sherwood, D. Abbott Green, J. R. Keeble, C. Cousins, E. Giles, G. P. Watkins, A. Preston Jones, J. McS. McCulloch (Ireland), and W. W. Hope

(Scotland). The large proportion of Suffolk rams taken in this first shipment was largely due to the fact that in recent tests the wool of the breed has been proved to be one of the finest of the British wools.

British Live Stock Interests.

LONDON, 24th March, 1921.

Hereford March Show and Sale.

About 280 animals were entered in five classes at the March show and sale of bulls of the Hereford Herd Book Society, which was held last week at Hereford, when the championship went to Messrs. P. Addis & Son's Chilstone Favourite, reserve being Mr. J. Tudge's Prince. The top price of the sale was 370 guineas, which was paid by Messrs. P. and G. Hughes for Mr. O. Williams' Crossways Don. Messrs. Sidey and Poels paid 300 guineas for Mr. J. Tudge's Prince, the reserve champion. Other good prices paid were 260 guineas (twice), 235, 220, and 210 (twice).

Birmingham Shorthorn Show and Sale.

The Birmingham Agricultural Society's 53rd show was held on the 2nd of this month at Bingley Hall, Birmingham, some 325 head from the leading herds in the country being entered. Many buyers from Argentina, Chili, New Zealand, Brazil, Denmark, and South Africa were operating; many of the best bulls went for export. Of the 118 head sold on the first day for £11,886, the 70 females averaged £66 4s. 6d. apiece, and the 48 bulls £150 2s. 4d. The second day's sale consisted of the younger bull classes. Here a four-figure amount, 1000 guineas, was given by Mr. F. B. Wilkinson for the Misses A. F. and M. K. T. Scott's Rosebud King. The aggregate amount realised at the two days' event was £30,273 for 284 head sold.

Devon Sale at Exeter.

The Devon Cattle Breeders' Society's 43rd annual event at Exeter this month was very successful. The top price paid for a yearling bull, from Mr. C. C. Skinner's herd, was 205 guineas, which was given by Mr. G. C. Alexander, of Winterbourne Stoke, near Salisbury. Another good price was 200 guineas, which was given by Mr. W. J. Huxtable, of Wrafton, Devon, for a yearling of Mr. Fred Stanbury's. The 118 bulls sold at an average price of £75 6s. 8d.

Penrith Shorthorn Sale.

Messrs. John Thornborrow & Co.'s first spring sale at Penrith this year brought forth a record entry of 530 head. Many other entries had to be refused, owing to shortage of space, and unfortunately some 96 head could not be sent at the last moment owing to foot and mouth restrictions. Buyers from Buenos Aires, the United States, and Denmark operated freely, and many well-bred animals were purchased for export. Of the 361 head sold, at an aggregate sum of £36,798 9s., the 130 females averaged £98 7s. 10d., and 231 bulls £104 14s. 1d.

York Shorthorn Show and Sale.

Last week the 3rd annual spring sale was held at York. The general average of the 216 head sold was £79. The bulls, 132 in all, averaged £71, the champion realising 670 guineas. Of the females which changed hands, 57 sold for £5569 4s. 8d., eight two-year-old heifers for £799 1s., and 19 yearling heifers made £1272 12s.

Suffolk Punches at Ipswich.

The first of three sales to be held under the auspices of the Suffolk Horse Society took place early this month at Ipswich, and with a large attendance, including buyers even from Canada, the event was most successful. The best stallions found ready customers, and geldings were bought to go all over the country. The highest priced stallion was Mr. A. T. Pratt's Godwick Goldstone, which changed hands at 400 guineas; 220 guineas was the highest figure given for mares, this being paid for Godwick Violet. In all 17 mares averaged £154 8s., 16 stallions £165 8s., and 27 geldings £112; the total sum realised for the 60 head disposed of amounting to £8297.

Pedigree Stock Exports.

The official returns of live stock shipped overseas during February give the following details:—

	No. Exported.	Declared Value.
Cattle	120	£27,405
Sheep	401	10,349
Pigs	15	687
Horses	5,339	266,513

Of the cattle sent overseas the Argentine took 55, Uruguay 13, the balance going to countries not separately enumerated. Argentina also took 89 sheep, 20 going to Uruguay, 2 to New Zealand, and 290 to "other countries." No shipments of either cattle or sheep were made to the United States, Australia, and Canada.

Recent purchases in this country by Liebig's Extract of Meat Company for shipment to their Rhodesian ranches have included 14 Sussex bulls, 13 Sussex heifers, and 5 Aberdeen-Angus bulls.

Messrs. Alfred Mansell and Co. recently sent from Southampton to a French client a large white boar by Bushes Emperor 3rd, out of Duchess of Bushes.

Stud Stock Notes.

SHEEP.

Badgery Bros. Ltd., Sydney, report having sold four Merino stud rams on account of Mr. G. Merriman, Yass, to Mr. D. Cadell, Deepwater Estate, at 50 guineas each.

Goldsbrough, Mort and Co. Limited invite entries of stud sheep for their Melbourne annual sale, which will be held at their stores, Bourke-street, on Wednesday, 3rd August.

Recent importations of stud sheep into New Zealand are two Border Leicester rams for Mr. William Black, of Waimate, South Canterbury, a Suffolk ram for Canterbury College, and a South-down ram for Messrs. Ellis Bros.

At the annual ram fairs at Christchurch and Dunedin (N.Z.), one-shear flock rams from Mr. J. A. Johnstone's Bushey Park Corriedale flock realised the highest prices. At Christchurch they fetched up to 12½ guineas, and at Dunedin up to 10 guineas, each.

The Austin Wanganella Co. Ltd., Wanganella, N.S.W., have sold a 4-tooth stud Merino ram, 9.12, to the South African Government for 1000 guineas. This ram is a son of 502, who was sold to gether with 20 ewes to South Africa for the sum of 6000 guineas last year.

Messrs. Powers, Rutherford and Co., Melbourne, will hold their fifty-fourth annual stud sheep fair at Younghusband Limited's wool stores, Kensington, on Thursday, 4th August. Entries are being received from the leading breeders throughout the Commonwealth.

Messrs. H. C. and R. M. Hawker, Bungaree, Clare, S.A., report the following recent sales of Merino sheep:—Lots of 570, 100, 25, and 10 selected rams to South Australian buyers, 40 selected rams to a Western Australian buyer, 200 selected rams to a New South Wales buyer, and 80 flock rams to a South Australian buyer.

The annual sheep show conducted by the Royal Agricultural Society of N.S.W. will be held in Sydney on 30th June, and 1st and 2nd July next. Sheep entries close on 4th June for dogs, and sheep dog trials on 15th, and on the latter date for wool. Schedules and entry forms can be obtained from the secretary, Mr. H. M. Somer, Ocean House, Martin-place, Sydney.

A special sale of Romneys was held at the Balclutha (N.Z.) Show Grounds on 31st March, when drafts from Messrs. Murray Bros., Clydevale, and Mr. Joseph Murdoch, Toiro, were offered by Wright, Stephenson and Co. Limited, in conjunction with Donald Reid and Co. Limited, and the National Mortgage and Agency Company Limited. Some excellent prices were obtained, Messrs. Murray Bros. selling a one-shear ram at 80 guineas, others at 56, 50, 47, 42, 40, and a number between 40 and 20 guineas. Mr. Murdoch sold six rams to 8 guineas.

Mr. Norman Nicolson, Streanshalh, Tasmania, reports having sold since the 1st January the following Corriedale sheep:—20 flock rams to Mr. Carmichael Lyne, 7 flock and 2 stud rams to Mr. H. R. Oldmeadow, 1 flock ram to Mr. Lohry, 15 flock rams to Mr. David Taylor, 15 flock rams to Mr. R. C. Field, 2 flock rams to Mr. O. M. Hayton, 5 flock rams to Mr. C. T. Jones, 2 flock rams to Mr. C. G. Ransom, 4 flock rams to Mr. Robt. Littlefield, 12 flock rams to Mr. W. L. Field, 1 stud ram to Mr. F. C. K. Pitt, 2 stud rams and 52 stud ewes to Mr. R. A. Clive.

"The Review of the River Plate" of 4th February gives a rather doleful account of the sale of imported Lincolns held at

Buenos Aires early in the year. Importers are finding it difficult to liquidate without heavy losses. A number of New Zealand-bred rams were offered at one yard, but after five rams had sold at an average of £124 the sale was postponed. The offering was only part of a larger consignment imported by a well known firm of sheepbreeders, who would not be likely to put the tops of the consignment on the market. The highest priced ram made £175, while the price paid for the other four sold was good in comparison with what English-bred Lincolns are realising on that market.

At the Otago (N.Z.) Ram and Ewe Fair there was a fair selection of various breeds, but no Downs or Lincolns. The quality as a whole was very fair. No high prices were secured, but the demand was better than anticipated. A few stud sheep were offered and no exceptional prices were recorded. Two stud Corriedale rams from the New Zealand and Australian Land Co.'s Moeraki Estate made 25 and 26 guineas. The best of the stud Border Leicester rams made 17 and 18 guineas. Romney Marsh rams made 4 to 10½ guineas. Flock Border Leicesters realised 1½ guineas to 3¼ guineas. Romney flock rams made 1¼ to 4 guineas. Corriedale flock rams realised up to 10 guineas for some yarded by Mr. J. A. Johnstone, of Bushey Park. The demand on the whole for flock sheep may be deemed better than was the case last year, when sheep were penned far in excess of buyers' requirements.

CATTLE.

Mr. Allan McFarlane, Wellington Lodge, S.A., reports having sold five pedigree Shorthorn bulls to the Quinymble Pastoral Company, S.A.

Mr. Edgar C. McConnel, Cressbrook, Q., has sold twelve herd Hereford bulls to J. Kitchen and Sons Prop. Limited for shipment to New Guinea.

The Lincoln Agricultural College, Christchurch, N.Z., has taken delivery from the quarantine station of a valuable Shorthorn bull purchased from Sir G. Greenall's estate in Kilmarnock, Ireland.

The Scottish-Australian Investment Company Limited, of Darbalara, N.S.W., have lately sold the Milking Shorthorn bull calf, Guardian of Darbalara, to Messrs. Alexander Bros., Kiama, for 400 guineas.

Pitt, Son and Badgery Limited, Sydney, have sold on account of Messrs. H. E. A. and V. White, Belltrees, Scone, N.S.W., 180 young red Shorthorn bulls to Mr. A. H. W. Cunningham, Strathmore, Bowen, Q.

Mr. George F. Doyle, Cardington Hall, Molong, N.S.W., reports having purchased the Bates imported bull Seahorse (C.H.B. 11764) from Messrs. Martindale White Bros., Martindale, Denham, for use in his Shorthorn stud.

Major Philip Charley, Belmont Park, Richmond, N.S.W., has sold through the agency of Pitt, Son and Badgery Limited ten pedigree Red Polled bulls, 3 years old, to Mr. Franc B. S. Falkner, for use in his Foxlow Red Polled Herd.

Mr. Geo. C. Clark, East Talgai, Q., won the championship for Aberdeen-Angus cows at the Toowoomba Show last month with his imported Scottish Queen. The same breeder's Tom Thumb was placed first in the class for bulls under two years old.

Mr. Frank Armstrong, of New Zealand, now advertises his noted Akiti Aberdeen-Angus stud in The Review. Mr. Armstrong, who has never spared expense in obtaining the best blood, recently imported a bull calf from Scotland at a cost of 1000 guineas.

Wilson and McDouall Limited, Calliope, Q., have recently purchased twelve stud Hereford heifers from Mr. W. Loder, Singleton, also the stud bull Gunyan Prince, bred by Messrs. Tindal and Son, Gunyan. Gunyan Prince is by Mansel Propeller (imp.), a son of the famous English bull, Starlight.

At the Penrith, Scotland, Shorthorn Show and Sales a couple of months ago, Mr. W. B. Errington's bull, Count's Heir, the champion of the show, was sold to Mr. Marshall for 1450 guineas. This was the only animal to realise four figures. The average for all the stock sold was £102 8s. 8d., as compared with £127 8s. 4d. last year.

A census taken by the British Department of Agriculture shows that in 1919 there were 35,726 pedigree Shorthorns in England and Wales. Lincoln Reds numbered 16,895, Herefords 11,777,

Friesians 11,273, South Devons 8405, Jerseys 6563, Devons 5900, Red Polls 4246, Guernseys 3706. The total, including other breeds with smaller numbers, is given as 115,618.

Compared with last year, prices slumped heavily at the American Shorthorn Breeders' Association Congress Show, held at Chicago in February. A total of 366 head of stock was sold for an average of £86 per head, as against 305 for an average of £192 in 1920. The top price for bulls was made by Swinton Rosicrucian 2nd, £1300, and the best for cows, £520.

Dalgaty and Co. Limited, Dunedin, have sold a Friesian bull calf, five months old, by Rosevale Plus Triumph, out of Burkey's Sylvia Pesch, and bred by Messrs. North and Sons, Otago, to Dr. Sewell, Victoria, at the high price of 550 guineas. The same firm have also recently sold five heifers and a bull of the breed to the Commonwealth at a satisfactory figure.

Good all-round prices were obtained at the dispersal sale of Mr. Thomas Bowling's Arrawatta (Inverell) pedigree dairy stock the end of last month. The Milking Shorthorn bull, Royal of Arrawatta, was bought by Mr. John Melrose, Mt. Pleasant, S.A., for 155 guineas, and Chorus Boy by Mr. Robert Melrose for 60 guineas. Ayrshire cows sold to 50 guineas, and Jerseys to 36 guineas.

Messrs. Evans and Miller, the recent visitors from South Africa, while in New Zealand purchased from Mr. Ernest Short four yearling Hereford bulls and five heifers, and from Mr. Frank Moore, of Kai Iwi, four heifers. They stated that the beef industry was advancing in Natal, which was looking to New Zealand for stud Herefords. There promised to be a big development in this trade.

Mr. C. H. Tindal, Ramornie, N.S.W., has sold the stud Devon bull, Ramornie Good Boy, by Highfield Fearless 2nd (imp.) to Mr. K. Beaton, Newton Boyd, N.S.W., and 11 herd Devon bulls to Messrs. Titcume Bros., of Dungog. The first sale was made through the agency of Messrs. Elworthy and Robey, South Grafton, and the second through the same firm, acting in conjunction with the Pastoral Finance Association Limited, Sydney.

Badgery Bros. Ltd., Sydney, report the following sales of stud cattle recently:—On account of Mr. McConnel, Queensland, one stud Red Poll bull, Shottford David (imp.), to Mr. Ian Wallace, Kergunyah, Vic., at 330 guineas. On account of Mr. J. C. White, Edinglassie, Muswellbrook, N.S.W., one stud Aberdeen-Angus bull to Mr. George Garnock, Cooma, at a very satisfactory figure. On account of Mr. Hunter White, Havilah, Mudgee, one stud Devon bull, to Mr. E. White, Bluff Downs, Q., at 100 guineas.

Messrs. J. M. Peck and Sons report having trucked from Beetoomba, Vic., to Farina, Northern S.A., a splendid lot of 96 pure Shorthorn bulls from 18 months to 2½ years, bred by the Tintaldra Pastoral Company, Upper Murray. These young bulls are heavily impregnated with the Derrimut strain, and several experts, who saw them spelling en route at Newmarket and Adelaide, pronounced them as one of the most level lots sent north for many years. They are destined for Messrs. Mackinnon Bros., Marion Downs Station, on the Georgina River, Western Queensland.

Mr. Percy Reynolds, Hobartville, N.S.W., reports the following sales of Hereford cattle during March, in addition to those mentioned in connection with the Sydney Show auctions:—Bull, Sir Gilbert, to Mr. C. H. McKeahnie, Queanbeyan; bull, Matchmaker, to Mr. E. C. Norton, Walcha; bull, Commotion, to Mr. A. T. T. Hayes, Barraba; and the heifers, Wakeful 1st and Victoria's Pet 2nd to Mr. W. A. Padbury, W.A., for 350 guineas; Queen Victoria 13th, Queen Victoria 18th, Lady Minerva 6th, Molly Minerva 2nd, Lioness 86th, Persistence 8th, and First Day 4th, to Mr. J. H. Davies, South Australia.

The Western Australian Government, besides the Shorthorns mentioned elsewhere in these notes as bought from Messrs. Lord Bros., Victoria Downs, Q., has purchased through Dalgaty and Co. Limited, Brisbane, in conjunction with Messrs. McDougall and Co., Warwick, three stud Shorthorn bulls and six stud heifers from Mr. W. B. Slade, Glengallan, Q., one stud bull and six stud heifers from Mr. J. Burgess, Canning Downs, South Queensland, one stud bull and six stud heifers from Mr. C. E. McDougall, Lyndhurst, Q., and one stud bull from Mr. H. Brookes, Albany Stud Farm, Q. These cattle are for the W.A. Government's Moola Bulla and Ascot Stations.

LITTLE'S DIPS

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USE LITTLE'S FLUID DIP FOR DRENCHING FOR LUNG AND INTESTINAL WORMS.

MORRIS, LITTLE & SON (For. & Col.) LTD.
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H. Denkin & Son, Queen Street, Brisbane.
Goldsborough, Mort & Co. Ltd., Rockhampton.
Burns, Philip & Co. Ltd., Townsville.
Geo. Ferguson & Co., Port Adelaide.
Henry Willis & Co., Fremantle and Albany.
De Garis Sons & Co. Ltd., Narracoorte, S.A.
AND ALL STOREKEEPERS.

Wilson and McDonall Limited, Calliope Station, Calliope, Q., include in their half-page stud advertisement appearing in this issue an excellent photo of the Shorthorn bull Count Goldie, an imported bull of undoubted merit and breeding, which is now being used in the stud. Count Goldie is a red, was bred by Mr. T. W. Whittome, Eastmore, Dodington, Camb, and sired by Count Benedict. The firm have also recently added to their Shorthorn herd two young bulls, sons of Clifton Admiral, champion at the 1919 Melbourne Royal Show. These were bought from the trustees of the late J. C. Hooke, are named Menindie Duke 70th and 71st respectively, and trace back through their dams to Marfleet's old red bull.

Messrs. Lord Bros., Victoria Downs, Morven, Q., have, after inspection by Mr. A. Haly, sold the following pedigree Shorthorn stock to the Western Australian Government, through the agency of Dalgety and Co. Limited, Brisbane:—Roan bull, Victoria Downs Peer 5th, calved 12th September, 1919, at 120 guineas; roan heifer, Victoria Downs Duchess of Morven, 100 guineas; red and white heifer, Victoria Downs Princess Rugla, 80 guineas; red heifer, Victoria Downs Duchess of Derrimut 2nd, 50 guineas; red heifer, Victoria Downs Duchess of Matilda 2nd, 50 guineas; red and white heifer, Beryl 3rd of Victoria Downs, 20 guineas; red and white, Victoria Downs Nell 4th, 20 guineas; roan heifer, Marjory 3rd of Victoria Downs, 20 guineas; roan heifer, Victoria Downs Duchess of Matilda, 20 guineas.

Moreheads Limited, Brisbane, advise us as follows re their sales to Messrs. E. W. Evans and A. M. Miller, of the Swaziland Ranching and Development Company, Bar R Ranch, South Africa:—"82 Hereford heifers, on account of the Trustees of Tocal Estate, Paterson, N.S.W., and 10 heifers, on account of Mr. S. Reynolds, Duninald, Paterson, N.S.W. We also attended to the shipping of four bulls and five heifers, which were purchased by the same people from New Zealand, connecting with those coming from Tocal at Sydney. The first draft of 40 heifers from Tocal left by the 'Medic' on the 12th March, the second draft of 61 head consisting of 42 heifers from Tocal, and 10 heifers from Duninald, joining those from New Zealand, by the 'Persic,' which left on the 26th April, the whole lot going to Durban, and were safely despatched without any mishap. The first consignment did the journey, and so far the second lot are doing all right."

At the Coonamble (N.S.W.) show this month, the championship for Shorthorn bull was won by Mr. J. A. Ibbott, and for Shorthorn cow by Mr. J. Jones, Bullagreen. The latter was very successful throughout, winning first for bulls one year and under two, first, second, and third for cow 3 years and under, first for heifer calf, second for cow with calf at foot, and also securing the Victorian breeders' trophy, open class, one bull and two heifers, 2 years and under, the property of exhibitor at time of entry. The N.Z. and A.L. Company, Wingadee, were first in bulls 2 years and under three, second in bulls one year and under two, second in Shorthorn heifers 2 years and under, first in pen of three fat bullocks, and first in single fat bullocks, any breed. Mr. T. A. Field, Warrana, was second in Shorthorn bull calves under twelve months, first in Shorthorn heifers one year and under, second in heifer calves under 12 months, first in pen of three Shorthorn heifers, and first in pen of three fat cows.

HORSES.

Mr. Allan McFarlane, Wellington Lodge, East Wellington, S.A., reports having sold the racehorse Topar, four years, by Iownit from Culvert, and a brown mare, four years, by Kerlie, from As You Like It, to a South Australian buyer.

Mr. J. A. Johnstone, of Bushey Park, N.Z., advises having acquired from Mr. John Shearer, Glenorchy, his prize two-year-old Clydesdale filly, Glen Felicia, a daughter of the imported Dunure Fabric (17864), who is a son of Dunure Footprint (15203), the greatest breeding and prize winning sire in Scotland to-day. The filly is equally well bred on the dam's side, being a daughter of the imported mare Nellie Campbell (36884) by the thrice Cawdor Cup winner, Hiawatha (10067). Nellie Campbell's dam is by Baron's Pride (9122), one of the greatest Clydesdale sires of modern times. The combination, Baron's Pride—Hiawatha blood, is regarded as the best cross in Scotland. At the Ashburton Show a couple of months ago Glen Felicia was placed first in her class, and secured the reserve championship, while her sire, Dunure Fabric, was sold in April for 900 guineas.

A. J. HUNTER,
F.I.A.G., etc.

JAMES HUNTER & CO.

Public Accountants, Auditors, etc.

PASTORAL MATTERS
A SPECIALTY.

DALBY, Q.

Graziers' Association of N.S.W. Annual Conference.

A number of very important matters are on the agenda paper for the annual conference of the N.S.W. Graziers' Association, to be opened in Sydney on the 24th inst.

The conference will first be asked, at the instance of the council, to consider what action, if any, should be taken against members who departed from the shearing policy of the association last season. If conference agrees that the "disloyalists" should be penalised, the Warren local committee will propose that those members who shone on the A.W.U. terms before the council gave permission shall be expelled from the association. Less drastic penalties are suggested by other districts.

The executive will submit proposals for a definite amalgamation of "all associations representing primary producers in New South Wales."

In regard to shearing organisation, the executive submits, by direction of the council, the establishment of an indemnity fund for reimbursement of losses which may hereafter be incurred by members through their adherence to the policy of the association, and that the executive formulate a scheme for submission to a general meeting of members.

In view of the slump in prices for all pastoral products, conference will be asked to affirm that it is essential to meet the claims of the A.W.U. with a claim for an all-round reduction in wages in work connected with pastoral pursuits. Also, on the score of the decreased returns from the industry, conference will be asked to agree to approach the Railway Commissioners to secure a reduction in freights on stock and wool.

In the political sphere, the executive proposes that the association affiliate with the Federal Country Party, and that conference consider amendments of the policy of the Progressive Party that may be desirable.

Several resolutions stress the necessity for more effective action in the destruction of rabbits, especially on Crown lands, and even by the introduction of a decimating disease.

Publications Received.

From the Shipping Newspapers Limited, a copy of the "Shipping and Commerce of Australia."

Trade and Customs and Excise Revenue of the Commonwealth of Australia for the year 1919-20, from the Commonwealth Statistician.

We have received from Mr. C. Alma Baker, of London, a copy of the souvenir of the *Australian and Malayan Battleplanes, 1914-1918*. The work is well bound and excellently illustrated, and contains a lot of interesting information regarding the 94 gift battleplanes from Australia and Malaya.

The first number of "The Graziers' Review," published in Brisbane in the interests of the United Graziers' Association of Queensland, has come to hand. This is the outcome of a movement on the part of the association to have a publication devoted especially to the purpose of supplying members with information regarding the work that is being done on their behalf, and is thus the official mouthpiece of the association.

Artesian Boring Notes.

NEW SOUTH WALES.

Bores under construction 1st May, 1921:—

Government.—Burren No. 2, 1386 ft. in hard sandstone, increase in flow at 1346 ft.

Private.—Dunumbral 2, 2568 ft. in shale, small flow at 2472 ft. Mogil, 2947 ft. in shale.

QUEENSLAND.

A bore has been completed on All Fives selection, near Barcaldine, at 1000 ft. The supply is fair, though not quite sufficient.

Messrs. Royle Bros., of Menin Downs, struck a splendid supply of sub-artesian water at 450 ft., which rose to within 100 ft. of the surface.

An artesian bore has been put down on South Comongin, near Charleville. The depth is 2918 ft., and the flow 1,050,600 gallons, and pressure 160 lb. This is the first good bore in that part of the district.

A final attempt is being made to clear the Roma (Q.) gas bore. Efforts to lower the water have not been successful with 1500 ft. of casing inside the bore, but further attempts are to be made. It is also proposed to abandon about 700 ft. of the bore, and put in a slanting bore from 3000 ft.

Lands.

Queensland Leaseholds.

Revision of Rentals.

At the sittings of the Land Court in Hughenden (Q.), last month, Mr. F. X. Heeney presiding, Mr. R. H. Edkins, on behalf of selectors interested in the cases to come before the court, asked permission to tender a statement relative to the present position and outlook of the pastoral industry. The court refused him the desired permission, but stated that it had no objection to the statement being read.

Mr. Edkins then read the statement, which was as follows:—

If it pleases the court, we as graziers, having cases for revision of rentals, desire to make a statement before the court either announces decision of recent sittings or hears any further case.

We, the undersigned, with all our genuine earnestness, desire to impress the court with the facts, viz.:—

1. That our industry has seldom, if ever, faced such a serious and ruinous position.

2. That stock values have fallen 50 per cent. or more during the last six or eight months, proof of which is attached hereto, marked and numbered cuttings from reliable papers.

3. That during the last twelve months beef and mutton for wholesale disposal have fallen at least 33 per cent. in general values, proof of which is attached hereto, marked and numbered cuttings from reliable papers.

4. That the bulk of our produce might almost be regarded as unsaleable, and in consequence a financial strain is inevitable.

5. That only 377,000 bales of wool were sold during the eight months of this season, as against 1,412,000 in the same period of last season.

6. That young sheep carrying some months' wool have recently been offered at 6s. 6d., whereas the same sheep would have readily sold at three times that value last year.

7. That cattle are hard to dispose of at approximately half last year's value.

8. That the expense of producing such produce, viz., wool, meat, &c., has increased so very seriously, with high wages and heavy rentals, &c., that we can hardly expect to realise sufficient to meet our expenditure for the current year, consequently any further burdens imposed upon our industry must necessarily mean the reduction of employees, and therefore the development of our country would be very seriously affected.

9. That even of recent years, many cases could show severe losses from droughts (in 1914-15 and 1919-20), from floods in 1918, from fires in 1918, and dogs during the last four years, but these individual losses would not compare with the general outlook which each and every grazier has to anxiously face in the near future.

10. That the sheep men have suffered serious losses and been forced to expend large sums in fighting the blowfly pest.

11. That cattle men have suffered similarly through the recent spread of ticks and consequent results.

12. That we fail to see how any reasonably just court can find a possible excuse for raising the rentals at the present juncture. We therefore emphatically protest against any extra burdens being imposed upon our industry, more especially as the court must be fully cognisant of the facts quoted herein.

In conclusion, we contend that any further defence of our case should be unnecessary, and merely a waste of time to the court and ourselves.

The Cloncurry Court.

At the sittings of the court at Cloncurry, before Mr. Heeney, the question of resumption from Eulolo holding was settled by resumptions in five areas on the east side, embracing 290 square miles. The rent of the balance of the holding was fixed at 72s., which was the assessing commissioner's valuation. The previous rent was 28s., and the court's decision at the previous hearing 42s.

The rent of Granada was fixed at 52s. per mile. In this case the representative of the lessee raised the objection lodged in previous cases—want of jurisdiction, &c.

In the case of Bivrambla, the representative urged that there was no such holding, the lease having expired on 31st August, 1919, and the lessee having obtained another tenure to the land under occupation license from the Crown of 42 miles, and it was not a holding under the Act of 1920. The objection was upheld.

Land Sales.

NEW SOUTH WALES.

Tolarno Limited has been formed to acquire the business carried on at the station property known as Tolarno, near Menindie, on the Darling, by Mr. M. S. Hawker. Capital of the company is £100,000, in shares of £1 each.

Ulster Park, Moss Vale, a residential estate, comprising about 704½ acres, has been sold at a satisfactory price to the Beak Pastoral Company Limited, of Rockhampton, Q., the agents being Pitt, Son and Badgery Limited, Sydney.

QUEENSLAND.

Nowambi, situated in the Hughenden district, has been purchased by Mr. Lethbridge.

Glenusk, Winton, the property of Messrs. J. W. Foulsham and Co., has been sold to Mr. Harris.

Jackdaw Downs, situated in the Hughenden district, comprising 17,988 acres, has been sold by Mr. Anning to Mr. McLean.

Alford, situated in the Roma district, comprising 7388 acres, has been sold by Mr. R. Conquest to Mr. H. Robinson, of Dalby.

Raywood, situated in the Roma district, and comprising 4776 acres grazing farms, has been sold by Mr. E. E. Kellock to Messrs. Blacket and Calvert.

Kirrewah, situated in the Roma district, comprising 68¼ square miles leasehold, 25,609 acres grazing farm, and 320 acres special lease, together with 1000 cattle and 45 horses, has been sold by Mr. Philip Hoskin to Mr. R. J. Calder.

TASMANIA.

Barnbough, situated at Bridport, and comprising 4262 acres or thereabouts, together with 1750 acres of Government lease, has been sold by Allan Stewart Limited, under instructions from the Exors. late C. M. Stephenson. The purchasers were Messrs. E. B. and G. Adams, and Exton Hart.

WESTERN AUSTRALIA.

Minderoo Station, on the Ashburton River, near Onslow, has been sold to Messrs. Forrest Bros. The property consists of 522,000 acres, and carries about 26,000 sheep, besides cattle, horses, and a few camels.

NORTHERN TERRITORY.

Avon Downs Station, situated on the Barclay Tableland, not far from the Queensland border, consisting of about 2100 square miles, has been sold, together with 32,000 cattle, to the Peel River Land and Mineral Company by the Avon Downs Pastoral Company. It is understood that the price was in the region of £250,000.

NEW ZEALAND.

A sale of small farms, into which the **Coldstream Estate**, Rangiora, North Canterbury, was subdivided, showed that the demand for land has eased off, as more sections were passed than sold. Sales were made at £60 to £80 per acre.

Publishers' Department.

THE TRUST AND AGENCY COMPANY of Australia has declared a dividend of 5 per cent.

THE NEW ZEALAND AND AUSTRALIAN LAND COMPANY LIMITED has declared an interim dividend of 2 per cent. on preference stock.

Attention is directed to a new series of page advertisements of the **CHAMPION SPARK PLUG**, the first of which is appearing in this month's issue.

DALGETY AND CO. LIMITED announce an interim dividend of 5s. per share (being at the rate of 10 per cent. per annum) for the half-year ended December 1920.

LYSAGHT'S NEWCASTLE WORKS LIMITED advertise that they are manufacturers of galvanised iron, &c. The works of the company are at Newcastle, N.S.W.

Among the school advertisements will be found a notice of the **GLENNIE MEMORIAL** schools at Toowoomba, Queensland. They are Church of England schools for girls.

THE QUEENSLAND NATIONAL BANK LIMITED has declared an interim dividend on the paid-up capital at the rate of 10 per cent. per annum for the quarter ending 31st March.

THE UNION TRUSTEE COMPANY LIMITED show a profit for the year ended February 1920 of £14,211 6s. 3d., out of which an interim dividend of 10 per cent. has been paid. The balance will be used in paying the ordinary dividend at the rate of 10 per cent. per annum and a special dividend of 8½d. a share.

Graziers' Federal Council of Australia.

Annual Convention.

The 32nd convention of the Graziers' Federal Council of Australia was held in the offices of the United Graziers' Association of Queensland last month.

The secretary, having read the notice convening the convention, the following representatives presented their credentials and signed the roll:—

John Mackay, O. E. Friend, Major N. W. Kater, M.D. (The Graziers' Association of New South Wales, J. W. Allen, secretary). H. M. Turner, L. J. Weatherly (The Pastoralists' Association of Victoria, Leslie Smith, secretary). A. S. Austin (The Pastoralists' Union of Southern Riverina, Leslie Smith, secretary). I. J. Warnes, A. E. Hamilton (The Stockowners' Association of South Australia, E. D. H. Virgo, assistant secretary). John Dunne (The Pastoralists' Association of West Darling, C. S. Wood, assistant secretary). Hon. A. H. Whittingham, M.L.C., R. H. Edkins, C. D. E. Francis (The United Graziers' Association of Queensland, Fredk. Ranson, secretary).

Messrs. C. R. Murphy, Jas. Clark, and J. P. Peterson also attended the convention as visitors.

Mr. Frank Wittenoom (Pastoralists' Association of Western Australia) was also associated with the convention.

The Hon. A. H. Whittingham, M.L.C., was elected president of the convention, and Mr. A. E. Hamilton, vice-president.

Mr. Whittingham, in returning thanks for his election as president of the convention, gave an interesting little address on the history of the organisation of the council, and after the minutes of the previous convention had been confirmed, the convention proceeded to consider the various items on the agenda paper.

Federal Council Constitution.

An application was received from the Pastoralists' Association of Western Australia for affiliation with the council, and after discussion this was unanimously agreed to. Mr. Frank Wittenoom, having signed the roll, was then admitted as a representative upon the council for that State.

Reports.

Mr. C. R. Murphy, who until recently was chairman of the Australian Woolgrowers' Council, presented a report of the operations of that body for the past year, in which he dealt with the wool position as it existed at the present day. Mr. Murphy's report has already appeared in the columns of the press.

It was resolved:—

"That a hearty vote of thanks be accorded Mr. Murphy for his most interesting and instructive address."

It was also resolved:—

"That after the full and lucid explanation of the wool position given by Mr. C. R. Murphy, this convention has no hesitation in urging every member of the federated bodies to fully adopt the resolutions carried at a conference held in Melbourne on 17th March, 1921, more particularly in the direction of regulation of quantities and the fixing of reserve limits." [These resolutions were given in full in our last issue.—Ed.]

It was resolved:—

"That a committee, consisting of Mr. C. R. Murphy as chairman, with Messrs. R. H. Edkins, L. J. Weatherly, A. S. Austin, J. Dunne, A. E. Hamilton, N. W. Kater, and F. Wittenoom be appointed to consider the basis on which calculations should be made in order to arrive at the cost of producing wool under the present conditions of the wool industry of Australia, and report to a future meeting of the convention.

"That each federated body be requested to have statistics collected from their members, showing the cost of production on the basis as approved by the convention, and that same be collated so as to show the average cost for each State as well as for the whole of Australia.

"That as the average market value of the present Australian wool clip is likely to be considerably below the cost of production, the present grave position and outlook demand the closest consideration at the hands of all those engaged in the industry."

In view of the retirement of Lord Inverforth, as Minister of Munitions, the following resolution was agreed to:—

"That this convention of the Federal Council of the Graziers' Associations of Australia desires to place on record the high appreciation which they have of the services rendered by Lord Inverforth to the Australian wool-growing industry in connection with the British Imperial Wool Purchase Scheme during his term of office as Minister of Munitions. The generous and fair treatment received by the woolgrowers of Australia in connection with this scheme is recognised as having tided the industry over a most critical period of its history.

It was resolved:—

"That a vote of thanks be accorded to the Woolbrokers' Associations of Australia for the work they have done in connection with the disposal of wool clip under the Imperial Wool Purchase Scheme, and also in assisting in arriving at the present scheme for the stabilisation of the wool industry."

The secretary of the Graziers' Legislative Committee presented a report of the work accomplished by that committee on matters connected with Federal legislation, taxation, &c. In connection with this report discussion ensued as to the hardships which were being experienced by many graziers in the payment of their taxes, owing to their inability to dispose of their wool or stock, and it was resolved:—

"That owing to the very depressed state of the industry and the delay in realising on pastoral products, the Commissioners of Taxes be requested by the Governments to treat with leniency any request for an extension of time for payment of taxation."

Pastoral Award.

Various resolutions dealing with the Pastoral Award and the new claims of the A.W.U. for fresh awards in the southern States and Queensland were then carefully considered, and as a result it was decided to submit to the A.W.U. proposals relative to the settlement of these claims.

Contractors' Registration Scheme.

A number of resolutions dealing with this matter were also dealt with, and as a result authority was given for the holding of a conference with the registered shearing contractors at an early date to consider amendments to the existing system on lines outlined by the council.

Organisation of Primary Producers.

The New South Wales representatives outlined proposals which are under consideration for bringing about a possible amalgamation of the various organisations of primary producers within that State.

Sale of Stock by Live Weight.

Mr. Warnes (S.A.) submitted the following resolution on the above question:—

"That in view of the great benefits to be derived from the practice of selling stock by live weight, this council is of opinion that all sheep and cattle sold at abattoirs or other markets should be sold by live weight, and in order that same may receive due consideration, the matter be referred to the Federated Associations for discussion, and their decisions thereon be reported to the next convention of the Graziers' Federal Council of Australia."

The resolution was carried.

Votes of Thanks.

With votes of thanks to the president, vice-president, and the secretaries, and the fixing of the date of the meeting of the next convention at Adelaide, the council adjourned sine die.

The Graziers' Association of New South Wales.

The fortnightly meeting of the executive committee of the Graziers' Association was held on 18th ult., all members being present.

Messrs. John Mackay, O. E. Friend, and N. W. Kater, who represented the association at the recent meeting of the Graziers' Federal Council of Australia, presented a detailed report of the business transacted at the Brisbane convention, and were cordially thanked for their services.

Business arising out of the convention was attended to, and among other things, it was decided that the secretary, Mr. J. W. Allen, should appear in the forthcoming proceedings in the Commonwealth Arbitration Court on behalf of the association, and for such of its members as may authorise the association to represent them in the proceedings. It is understood that the A.W.U. does not propose to employ counsel. The general conduct of the arbitration proceedings was, by Federal council, placed in the hands of an arbitration advisory committee representing each of the States, who will, when the occasion arises, deal with the claims in detail. In the meantime Federal council has decided that the industry cannot support rates in advance of those of the 1917 award, and consequently every endeavour will be made to obtain from the court an award not exceeding the 1917 terms. It is anticipated that a compulsory conference will be convened and held prior to the arbitration proceedings.

An invitation was received from the Under-Secretary for Finance and Trade for the association to appoint a representative upon the consultative committee to confer with a sub-committee of the Cabinet on the question of insurance against drought. It was decided to appoint the president, Mr. John Mackay, and to

arrange for emergency representatives in the event of his being unable to attend meetings of the committee.

Attention was called to the present high railway charges for carriage of live stock, the following comparison being made between the rates operating in July 1914 and those of the present time:—

	July 1914.	Present Day.
Narrandera to Sydney	£7 8 3	£11 19 7
Coomamble " "	7 15 1	12 7 10
West Tamworth " "	6 4 6	10 5 5
Brewarrina " "	9 12 6	15 7 0
Orange " "	5 3 10	8 6 8
Moree " "	8 5 10	13 3 2

The value of both sheep and cattle to-day are lower than they were in July 1914, and the prices for wool and meat, tallow and hides, have greatly depreciated during the past few months, but the freights, wages, and taxation have very greatly increased since 1914. The matter is considered one of great importance to the industry, and will be fully considered at the annual conference to be held on 24th May with a view to strong representations being made for a reduction of railrage charges.

[A deputation from the Producers' Associations' Central Council and Homebush selling agents asked the Chief Commissioner on the 6th inst. for a reduction of stock freights on the railways to the 1914 level. The latter, while sympathetic, said that the Commissioners were expected to make the railways pay interest and working expenses. Costs had gone up nearly 100 per cent., and consequently he could not very well reduce rates.—Ed.]

Correspondence was received relative to the freight charges for conveyance of refrigerated cargo overseas, but the very small reduction which has been conceded is regarded as quite inadequate, and it was decided to make further representations with a view to greater reductions being granted.

Business submitted by local committees of the association was considered in detail, and 21 new members were admitted, totalling 34,671 sheep and 1298 cattle and horses; 20 resignations were accepted, mostly consequent upon disposal of properties.

The Latest Books.

Letters from the Cape, by Lady Duff Gordon. (London: Milford; price, 3s. 6d. net.) Those readers who remember the writer's better-known "Letters from Egypt" will welcome the appearance of the present series of delightful letters, now published for the first time separately. The picture of Cape Colony of sixty years ago which is presented is extremely interesting, and the towns and inland villages of the Cape are described in a very vivid manner which will interest all who have a warm spot for the Union in their hearts.

The Tale of a Trooper, by Clutha N. Mackenzie. (London: John Lane; price, 6s. net.) This work conveys in a vivid manner the experiences and sensations of a typical Anzac en route to the war, then landed at Gallipoli, and finally "knocked out" in the terrible battle of Chanak Bair, where he was blinded by a shell within a few feet of the fiercely-contested ridge. Only towards the end of the work do we learn the writer is blind; his capacity to rise above this affliction is vividly evidenced on every page of his splendid book. How many readers in and out of New Zealand realise before they reach the end of the volume that the writer is the gallant son of the late High Commissioner in London?

Seeing Pennsylvania, by John T. Faris. (London: Lippincott; price, 21s. net.) The present volume contains eight routes carefully described and rich with illustrations, revealing for the benefit of tourists the many beauties of Pennsylvania. The writer is a well-known American author of travel books, and in the present series of routes we believe that every county in the State is entered on one or more occasions.

Flgs from Thistles, by Isabel Maud Peacocke. (London: Ward, Lock; price, 7s. net.) A second-class boarding-house for young men in Auckland, N.Z., forms the background of this novel. There is little local scenery, and nothing that is at all inspiring in the work.

Cocoa. (A. and C. Black, London; price, 3s. net.) This small book is one of Messrs. Black's series of "Peeps at Industries." Free from technicalities, each volume is written from first-hand knowledge, and with its numerous photographs the present book gives one an absorbing little story of one of the world's chief commodities.

Agriculture and Irrigation in Continental and Tropical Climates, by Kinsley D. Doyle. (London: Constable and Co.; price, 19s. net.) Written to supply information that might be useful to anyone who intends to seek abroad for favourable opportunities in agriculture, this work is well worth attention. There is a large amount of carefully compiled information on stock, cereal, and fruit farming in almost all parts of the world outside Europe. Irrigation farming is given a very prominent place.

The Curtain, by Alexander Macfarlan. (London: Heinemann; price, 8s. 6d. net.) A very unconventional sort of novel, the scene of which is laid in Corsica, the prominent persons in the plot being the British Consul at Bastra (Hugh Cardinal), his secretary (Miss Gay), and Mabel Cain, who plays a violin in a cafe orchestra. It is not a story that appeals or carries one forward with added enjoyment.

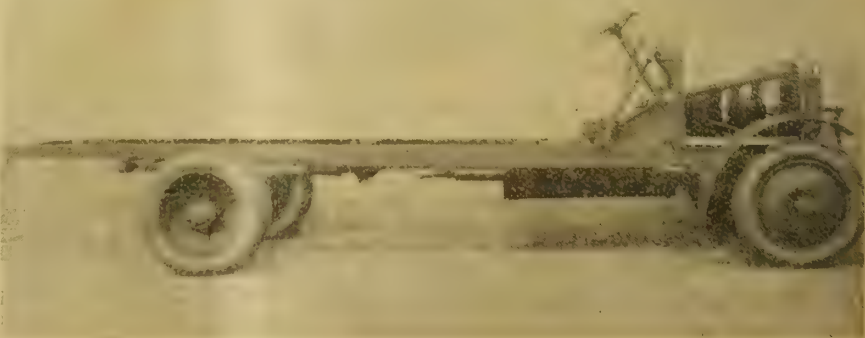
A Lady Doctor in Bakhtiariand, by the late Elizabeth N. Macbean Ross. (London: Leonard Parsons; price, 7s. 6d. net.) Dr. Ross was one of the courageous band of Scottish women who during the war helped to clear Serbia of typhus, and herself died there from the disease. Before going to Serbia during the war, Dr. Ross worked in Persia among the semi-civilised Bakhtiari tribes, and this book contains the record of her observations on these people, who inhabit the mountains and upland valleys of Persia between Ispahan and Khuramahad. It is a distinctly original contribution to its subject.

The Bases of Agricultural Practice and Economics in the United Provinces, India, by H. Martin Leake. (Cambridge: Heffer and Son; price, 15s. net.) This volume is based on lectures given by the author when he was principal of Cawnpore Agricultural College, and, as might be expected, the subject is handled in an expert manner. The relations of agriculture to the economic and social fabric of the community are carefully dealt with.

Frontier Folk of the Afghan Border—and Beyond, by L. A. Starr. (London: Church Missionary Society; price, 4s. 6d. net.) Mrs. Starr, widow of the late Vernon Harold Starr, who was cruelly murdered by Pathans in Peshawar in 1918, has given us a book which will be of the greatest interest to all interested in North-western India. The album contains a number of beautiful photographs, with a finely-coloured frontispiece, and some brief explanatory notes, and enables one to understand and appreciate better the character and types of the people along the Afghan Border.

Pilgrimages in Italy, by Gabriel Faure. (London: Nelson; price, 2s. 6d. net.) M. Gabriel Faure's book here noticed has been translated from the French by B. H. Morgan. Under the headings "The Country of St. Francis of Assisi" and "The Country of St. Catherine of Siena," he gives us a picturesque sketch of Italy, together with a number of delightful pictures of the country.

The Second Wife, by Katherine Tynan. (London: John Murray; price, 7s. 6d. net.) "The Second Wife" is the story of a loving woman, over whose otherwise happy marriage stretches the shadow of the first wife of her husband. There is a second story in the volume, "A July Rose," which is a study of a woman in her maturity holding her own against an attractive but selfish girl in the matter of the man she loves.



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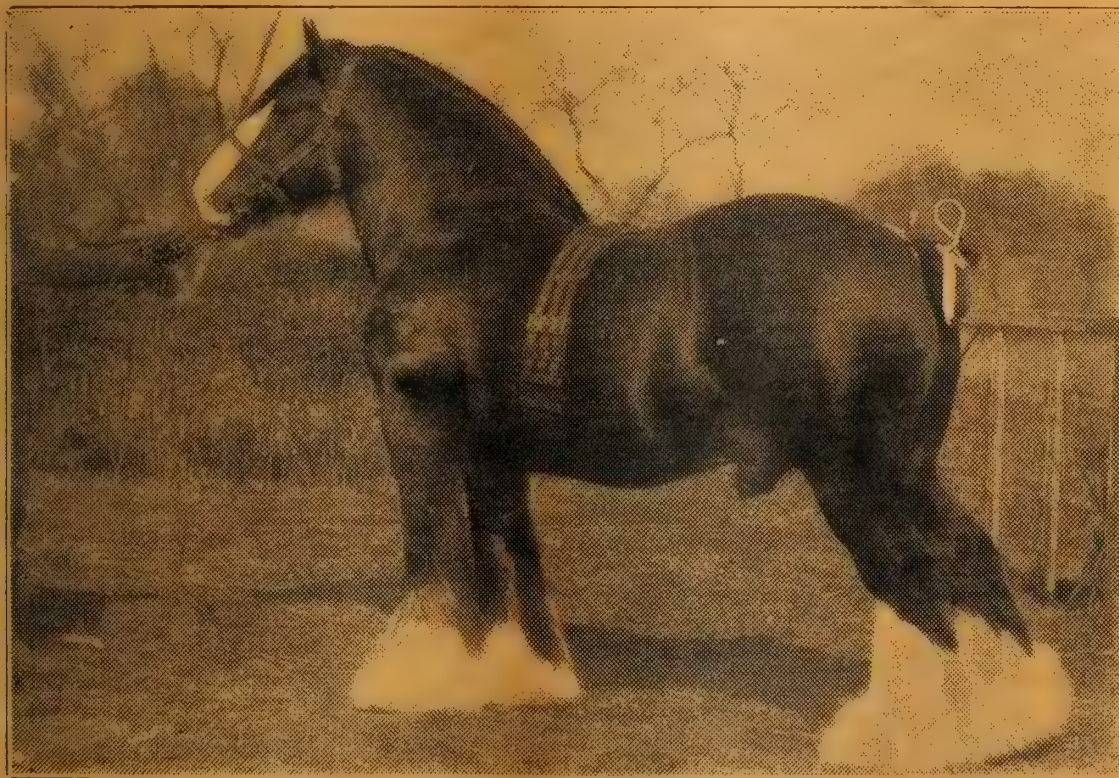
THE PASTORAL REVIEW

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VOLUME XXXI.



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Of all matters affecting the Pastoral and Agricultural Interests throughout Australasia.

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Editorial Notes.

Many important matters of current interest are dealt with this month, and a brief list for guidance may be given here. Among the special articles readers should pay particular attention to the first leader entitled *Get Together*—The Cult of Independence, Soldier Settlement on the Land, The Relative Position and Prospects for Crossbred and Merino Wool (by "Talgai"), Common Sheep Diseases (a continuation of the instructive series of articles commenced in our last issue), Trapping and Poisoning the

Dingo, a valuable illustrated contribution by a Western Australian expert, and The Care of Dams. Other matters discussed are:—The Campaign against Drought and Scheme for Fodder Conservation, Relief for Necessitous Graziers, The General Pastoral Outlook, Queensland Pastoralists and Income Tax, Carriage of Stud Sheep on the Railways, Store Stock Rates on the Railways, Beef Export Trade in Queensland, Shearing Rates and Conditions in connection with New Awards in Australia and New Zealand, Selling Stock by Weight, Blowfly Experiments at Dalmally (Q.), &c. There is also a large number of very interesting Letters to the Editor on the South African Meercat and the Rabbit Pest in Australia, Warts on Cattle, Sheep's Health and the Blowfly, Poisoning Blowflies, Subdivision of New South Wales into smaller States, and so on. "Gnome" deals with car attention and repair by the owner in his own garage, and gives a useful list of tools required; "Fife and Drum's" Sporting Notes include references to Public Schools Boat Races at Geelong, hunting and horse racing in Melbourne. We have to apologise for the absence of our London correspondent's meat letter owing to delayed mails, but other trade reports are complete. The forthcoming Sydney Sheep Show and Sales, including a list of some of the offerings at the latter and the question of holding sales at the showgrounds, are dealt with, and in Record Columns will be found reports of the recent annual conference of the Graziers' Association of New South Wales, the P.P. Boards of New South Wales, and several other important items pertaining principally to shearing rates and conditions. The above gives only a very condensed summary of the contents of this issue, which is a very full one, but it can be read from cover to cover with profit, interest and instruction.

* * *

The industry is "up against it" in Australia as in other producing countries. It is not a permanent condition, but a phase consequent on the existence and operation of certain economic factors and laws again exerting their force in the channels from which they were temporarily deviated by human artifice during the war. All the factors that influence value are in course of readjustment, and value suffers in the process. One of the heaviest losers in the shuffle, as we have repeatedly pointed out, is the sheep and cattle owner. He made satisfactory profits during the war, receiving a consistently good price for his wool and meat. The greater part of those profits was either reinvested in the business or else went to make good losses incurred in subsequent drought and to pay war-time profits tax and increasingly heavy income tax. Moreover, it must not be forgotten that as the prosperity of the industry waxed, higher and still higher wages were granted to all grades

and sections of labour employed on stations, until to-day they stand at a level that was only payable as long as prices for primary produce remained also at an exalted level. The cost of production also increased enormously in many other directions. Still, till the inevitable slump came, sheep and cattle raising was a very satisfactory paying proposition. Now, however, we have a very different state of affairs. Values have sagged and sagged, and even yet no man can say definitely that bottom has been touched, though we hope and believe so, but the cost of production, let alone showing no corresponding fall, has remained where it was and in many respects has even increased. Drought, in New South Wales last year particularly, hit hundreds and thousands of small men so badly that they haven't a hope of meeting their liabilities to-day, and in fact the whole industry, big and small man alike, is, as we have said, "up against it" in greater or lesser degree. His only chance to pull through, and thus save the solvency of the country, is to receive the very limit of accommodation his financiers can afford him, a sympathetic and helpful attitude on the part of his Government, a reduction in the cost of production and marketing wherever possible, and a revival in the markets for his produce. The man in the street is apt to regard the man on the land as belonging to an absolutely independent community, but if the latter goes under it won't take his brother of the street long to realise who it is that really butters his bread.

* * *

There has been much discussion of late in Federal and State Houses of Parliament and in deputations to responsible

Graziers' Difficulties.

Ministers regarding the straitened circumstances of large numbers of the smaller graziers, particularly in New South Wales, resulting from the heavy losses suffered in recent droughts and subsequent absence of income due to the collapse of the markets for their produce, while the heavy cost of production has shown no corresponding decrease. That these men are in a bad way there can be no denying, and the fact that they are liable at any moment to be forced to give up the fight is a very serious thing for the country in general. The principal suggestions for a remedy have been that State and Federal Governments should provide monetary assistance in some form or another for the sufferers, and that the banks should be brought to a better conception of their duty towards those for whom they have stated they can provide no further accommodation. The latter suggestion comes mainly from those who have no realisation of the responsibilities of big financial institutions and little better knowledge of the real financial position. It can be taken for granted that the banks are not such fools as to discourage or kill for the fun of the thing business which they know it is to their best interests to foster to the limit of their ability. Their vision is not circumscribed by the present day or present conditions, and they can be relied upon to do the utmost that lies in their power for their country customers. As a matter of fact the banks have been required within the last six months or more to finance their customers in all departments of production and commerce to an unprecedented extent. Authentic statistics show that the advances, &c., of the Australian banks at the close of March last aggregated £43,250,000 more than for the opening quarter of 1920. The banks thus rightly claim to have shouldered their heavily increased obligations to the community. The excess of imports over exports for the current year to the end of March amounted to nearly £34,500,000, whereas for the corresponding term in 1919-20 exports exceeded imports by approximately £49,500,000. In the later period, therefore, it has been necessary to finance artificially to the amount on difference of a little less than £84,000,000, which will indicate how the resources of the banks have been depleted. We consider that the Governments might well establish committees in affected districts to deal with the outstanding debts of small graziers, and pay same. The amount advanced could

soon be repaid with interest, as the depression in the industry is only temporary, and it would pay the Governments far better from a revenue point of view to finance necessitous cases than have them go out of business altogether. Further help lies in the power of one of the gentlemen who has been most persistent in urging the graziers' claims to assistance, viz., Mr. Blakeley, M.H.R., president of the A.W.U. He has been eager enough to recommend further accommodation by the banks, but he would be more helpful if he would use his influence with the A.W.U. to induce that body to refrain from seeking further increases in wages while the industry is suffering to the extent that has induced him to take up its cause.

* * *

A recent issue of the "Townsville Bulletin" contains an interesting article on the current position in the meat export trade in the north. After reviewing the circumstances that have led up to the existing slump the writer suggests that as the exporters are not prepared to offer more than about 15s. per 100 lbs. for cattle at the works, graziers should arrange with the companies to freeze and ship on their account, as was done occasionally in the early days of the trade. The article sums up with the following words:—

"It will be an economic catastrophe not to treat the tens of thousands of cattle now fat, and which if untreated may not realise any large advance in value next year. It is surely time for co-operation between the cattle owners and meat factories; let the spirit of the pastoral giants of 1891, which opened up the meat trade, though poorly equipped to do it, actuate their more prosperous successors of to-day. Why do not the pastoralists appoint a committee to confer with the meat companies, and arrange a course of action? There will be risks, big risks, not of actual loss of money, for it is certain there will be a margin of profit over operating charges, but a loss of profits."

We agree that it might be a good thing for the pastoralists and meat exporters to get together to discuss the position. A friendly conference might find some way out of the impasse, but we fear the suggestion that graziers should ship on their own account is hardly practicable at the present time. It may not be generally realised that it costs fully 3½d. per lb. to kill, freeze and ship beef to London. Suppose that the works proprietors were prepared to treat stock on owner's account on that basis, an initial outlay of £9 7s. 6d. on every 600-lb. bullock would be necessary. As a set off against that the grazier will get the value of the hide and fat, say, 31s. 6d., when and if they can be sold. These items reduce the net outlay to £7 16s. per head, or £7800 on a mob of 1000. The shipper would have to be out of pocket to that extent for perhaps more than three months, as it is more than doubtful if any bank would advance such a large sum on the security during the existing financial stringency. Even when the meat reaches London there is no guarantee that it is going to sell at a reasonable profit. The latest quotation for Australian beef on Smithfield market equals just on 5d. per lb. for the whole carcass. Deducting costs, that leaves 1½d. per lb., which, after taking the hide and fat into consideration, is just about what the meat companies are reported to be offering, and they pay cash on delivery at the works, and take all the risks.

Queensland graziers have made numerous representations by deputation and letter recently to the State Government for extension of time in which to pay their income tax, but the only change they have got from the Treasurer (Mr. Fihelly) has been a few gratuitous insults and the statement that those who wished time for payment or a deferred system might have it if they told him exactly what income they paid tax upon during the war period. He said that when the seasons were good, and there was a ready demand for their products, pastoralists and graziers sat back and abused the Government, and did their best to damage the credit of the State. In fact, they financed to England a delegation a little while

ago to prevent Queensland from getting loan money. Now that the season was at its best, but there was no market for their products, the Ministry found them, like common mendicants, waiting on the doormat of the Minister for Railways and importuning him to give them concessions in freight from the department that they were always condemning. There was no necessity for Mr. Fihelly to lower the dignity of a Minister of the Crown by indulging in senseless and groundless recriminations, but it is obvious that the rebuke administered to the Government in London some time ago when it sought to raise a loan there is still rankling bitterly. Evidently the lesson has not yet been learned that capital is a very sensitive commodity, and that Governments cannot play fast and loose with its rights and privileges without having to pay the piper in the long run. The cold eye with which the mendicant—or let us say, suppliant—was regarded in London, “importuning for money those whom it had always been so ready in condemning and reviling”—much the terms used by Mr. Fihelly in the above—was due not to the actions of any private individuals or delegations, but to the suppliant's own policy of confiscation, repudiation and general extravagance.

Sir Thomas Robinson, ex-Agent-General for Queensland, and a man in the inner financial circles of London, dropped a strong hint to the Queensland Government during a dinner at which he was entertained by the Cabinet. Sir Thomas had a talk with the governor of the Bank of England just before he left London, and that gentleman said:—“Don't forget to remind your people that at present they are under a cloud.” Sir Thomas, in that quiet, courteous way he has, rubbed in the salt by explaining that the governor of the bank had sent some kindly messages to Mr. Theodore, who left an impression at home that he was a man capable of understanding and capable of learning. When he delivered the message to Mr. Theodore, he said, he urged him that no opportunity should be lost of re-establishing the credit which Queensland used to enjoy. To accomplish this, he added, much spade work must be done. This statement fell after an explanation of the financial position of Queensland in relation to London. She has to remit £2,600,000 per annum as interest on loans, and in a few years, in common with other States, will have to raise a considerable sum of money to renew loans. The future will tell whether these plain hints have fallen on good soil, but judging from a speech made immediately afterwards by the State Treasurer not much can be expected. The only hope would come from Sir Thomas himself. There is a strong feeling in Queensland that he is the man who can bring the disunited sections of the Queensland Opposition together and lead them out of chaos into political victory. If he did that he would crown his long and useful life with a work of great benefit to his State and to Australia in general. Queensland badly needs leading back into the fold.

A correspondent gives a serious instance in this issue of the way stud sheep are carried on the New South Wales railways, and urges that the commissioners should make and attach special vans to the mail trains for the carriage of this valuable class of stud stock. In the case in question a consignment of special stud ewes and lambs was despatched on a 250-mile journey, and the time occupied before they could be unloaded at their destination was 41½ hours. They arrived late at night, and could not be got out till the following morning. The matter was discussed at the recent annual conference of the Graziers' Association, and a motion carried on the lines of the above suggestion. Later, however, in the course of an address to the meeting, Mr. Fraser, Chief Railway Commissioner, said that it would be necessary to attach another engine to the mail train if even one special van for the carriage of stud sheep were added. A delegate interjected, “You carry racehorses,” to which the commissioner replied that the Railway Department received a large

indirect revenue from the carriage of racehorses, as there was usually a race train for passengers run at the same time. It seems to us that Mr. Fraser has not considered the fact that, apart from the direct revenue he would get from the haul of special stud sheep vans, there is also an enormous indirect revenue. A very large proportion of the total railway revenue in New South Wales is derived directly and indirectly from stud sheep, as they are really responsible for the maintenance of our flocks, and have created the great increase in the weight of wool per individual, and ultimately carried on the railways. In any case, if the engines are now hauling their absolute capacity, it is time more powerful ones were constructed. There should surely be some reserve of power, at least, one would think, sufficient for the haulage of a light bogie waggon carrying a few sheep. Stud breeders don't want or expect such a concession for nothing. It would be worth paying for.

* * *

Some striking figures were recently placed before a meeting of the Inverell (N.S.W.) P.P. Board by Mr. G. R. Skelton, a grazier in that district, and a director

The Rabbit Curse. of the board. He stated that 14,411 tons of rabbit skins had been sold in Sydney during the past seven years, and allowing 8 skins to the pound this represented a yearly average of 36,000,000 skins. On the supposition that 100 rabbits were left behind for every one caught or poisoned, this meant that New South Wales alone was carrying 36,000,000,000 rabbits, and on the generous basis of 40 rabbits to one sheep, eating the feed and soiling the pasture that should carry 90,000,000 sheep. At 8s. per head return per annum, the pest was thus costing the State the sum of £35,000,000 every year. No allowance is made for the number of rabbits that die from natural causes, which, however, may be offset by natural increase, or for the wholesale decimation periodically caused by droughts; still the figures are only intended to give an approximate idea of the dimensions of the curse. When we realise that New South Wales alone—practically unimproved—carried 62,000,000 sheep in 1891, and taking into consideration the improvements effected since then, it does not seem so improbable that the State, in spite of the increased area devoted to cropping pure and simple, could now carry 90,000,000 sheep additional to the present 30,000,000. Mr. Skelton also outlined several suggestions for dealing with the trouble as follows:—The board form Rabbit Destruction Associations of not more than 30,000 acres, with an honorary inspector for each association to report progress to the board; the board to supply poison at not more than half price, and keep a record of where it goes; the board to appoint one month when all land must be poisoned; a sub-committee of three members of the board be appointed to absolutely manage the destruction of rabbits; and that a rabbit inspector be appointed to give his whole attention to the matter. Whether Mr. Skelton's figures approach anything like accuracy or not, the fact remains that the pest is a crushing burden on the productiveness of the country, and wholesale concerted and concentrated measures are necessary to bring slackers—among which must be included the Government in respect to Crown lands—into line to reduce the rabbits to reasonable numbers. The above suggestions, we believe, are on sound lines, although it may not be practicable to supply poison at half price, and the appointment of a special inspector would only be duplicating the work of the groups.

* * *

We have so often dealt with this subject that it is with a feeling of hesitancy that we once again introduce it to our readers. Journalistic sense says “Give them something new,” but common sense tells us that there is no need for shame, for after all, it represents one of the most important problems confronting Australians, and it has become obvious enough that only persistent hammering can hope to reform the narrow, prejudiced and impractical views adopted by people and politicians on this vital ques-

Running the Tropics.

tion. Our opinions and the workable compromise that we consider should be acceptable to all parties we have set out on numerous occasions, and now we give the very sound and practical opinion of Dr. R. W. Hornabrook, of Melbourne, a man who knows his tropics thoroughly, who can speak from experience, and who is devoting all his spare time to the promotion of a better understanding between those peoples who have national and commercial interests in the Pacific, the storm centre of the future unless harmonious relations can be established, based on a broad and mutual recognition of national rights, privileges and pride of race. Dr. Hornabrook says:—"I am rather afraid that at the present time in Australia we are suffering a little from an attack of swelled head—not only do we desire to dictate to the rest of the world how the tropics should be run, but we even find men who have practically no knowledge of the tropics and other conditions of life there saying that they are going to run the Pacific Islands on a White Australia basis—in other words, they are out to tell the Almighty that he did not know his own job. . . . To-day in Australia in the Northern Territory and in Western Australia north of the Tropic of Capricorn we have an area of 884,000 square miles with not 10,000 white people—in fact, it is nearer 7000. What is going to happen there in the future? Australia is not going to keep herself white by any number of people, no matter who they are or what their standard of intelligence may be, sitting down in a temperate climate and shouting 'we will have a White Australia in the tropics, but it is for someone else to go up there and make it white, not ourselves.' There is no country in the whole world between the tropics where the manual labour of the country is done by the white man, that is the Anglo-Saxon white man, and Australia is not going to alter the running of the earth. If the White Australia policy is to come to any practical good in the tropics it will certainly not be by means of the Anglo-Saxon white—for one thing, he will not go there *in any quantity and take his women-folk* as long as he can make a decent living in the more temperate parts." Dr. Hornabrook concludes with the pungent opinion, with which all men of practical tropical experience will agree, that "from a theoretical and poetical point of view the White Australia policy in the tropics is excellent, but from a practical point of view and as far as the Anglo-Saxon is concerned I do not think it is worth a damn."

* * *

Whilst it is not claimed that the dairy industry has saved the financial position in New Zealand, there is no gain-saying the fact that the returns from

Dairying in New Zealand. this source have gone a long way towards maintaining stability. The sale of

the late season's output of butter to the Imperial Government at high prices not only relieved the producers from the risks of the market, but has secured a regular income to a large body of producers. A good market was also found for cheese. The returns now show that the combined value of butter and cheese exported was £16,033,434, and added to this there were the exports of dried milk, casein, condensed milk, sugar of milk and other milk products. The amount of butter and cheese consumed locally was worth about £4,000,000, so that New Zealand's dairy industry has returned to suppliers during the late season over £20,000,000. The quantity of dairy produce that went into the grading stores for export during the dairy year (1st August, 1920, to 30th April, 1921) was as follows:—Butter, 668,613 cwts. (last season, 364,778 cwts.); cheese, 1,059,183 cwts (last year, 1,135,958 cwts.). It is not anticipated that such good prices as have been realised during the late season can rule during the coming season, but cheese will probably pay better than butter to produce, and as most of the large factories have dual plants, there is no difficulty about making that which will be most profitable. The slump in the wool and sheep markets is likely to have the effect of increasing the number of suppliers to the dairy factories during the coming season, and it is already reported that a good many farmers on suitable land in the North Island will replace their sheep with cows.

Review of Pastoral Situation.

New South Wales.

SYDNEY, 7th June, 1921.

The almost phenomenal rain that has fallen during the past four or five weeks has produced wonderful results. There is not a part of the State that has not benefited by it. This is one of the finest autumns the country has seen, and all the pastures are in splendid condition. The dairying and wheat districts could not be better. Grass is everywhere, and even the north-west, which for a while suffered from a distinct shortage of rain, and looked as though it might be in for another drought, is now in an excellent state. The stock are rolling fat and in fine fettle for the winter months. The season in many parts of the State is described as the best for the past 25 years.

The wheat belt is in perfect condition, and late-sown crops are sure to give good results in view of the present fine season.

Graziers' Difficulties.

Sundry deputations have waited on the Government recently to ask for immediate assistance from the State, to enable necessitous graziers to meet their liabilities and ease their position with the banking institutions. They are not asking to be spoon fed, but they are very hard pressed owing to the general slump in the value of their produce, and to the cautious financial policy necessarily engendered in banking circles by the uncertainty of the outlook. No one can say how long it may be before the clouds lift, and financial houses have consequently had to adopt a very careful policy, while at the same time they realise the necessity of extending to their rural customers the utmost credit possible.

The recent conference of the Graziers' Association carried a resolution urging the Government to assist the smaller graziers and rescue them from their desperate financial plight. This resolution was presented to the Minister of Agriculture the other day by a deputation from the association. "We do not," said Mr. Wearne, M.L.A., who stated the case for the deputation, "come to you for charity. We only ask you to assist us by finding some method of tiding these men over their trouble. We do not say the banks are crushing these people, because we realise the banks are up against it also. They know their success depends upon the success of the primary producers." It was suggested that the Government should not harass suffering graziers by insisting at this juncture upon the payment of Crown rents, but should suspend those obligations for six months.

Other members of the deputation, while supporting Mr. Wearne, also stressed the importance of giving effect to the following further motions of the conference:—

That the western division be tested for water, and boring plants be supplied to lessees; further, that Crown lessees be subsidised in testing the district for water.

That all stock brands be cancelled, and that owners be required to re-register their brands at a nominal fee; present owners to have absolute preference for brands.

That a proper system of registration of cattle earmarks be established.

That, in view of the alarming increase of noxious weeds in this State, the administration of the Noxious Weeds Act be placed in the hands of the P.P. Boards, as it is considered these boards are the most interested and capable bodies to administer that Act.

In his reply the Minister pointed out that what was really wanted to afford the relief was a loan of about £4,000,000 or £5,000,000, but they had to face the position with what they now had. Unfortunately, there was no hope financially outside a loan, and even the balance remaining from the Necessitous Farmers Fund was not as high as members of the deputation thought. As a matter of fact, there was only about £150,000 remaining. If the banks could not assist the men he did not know where the money was to come from.

He promised, however, to make representations to Cabinet for the payment of money available from the Necessitous Farmers Fund, and also from any funds accumulating from payments by farmers to the Government out of the 1s. 3d. a bushel payment. He would also tell the Minister for Lands the desire of the deputation that the payment of Crown rents be suspended.

As stated there have been other deputations—to the Acting Premier—while a representative body from the Coonamble district went to Melbourne and laid the facts before the Acting Prime Minister. The gist of their petitions, however, has been the same—temporary financial accommodation to tide over the present difficult times.

The Dingo Invasion.

Mr. Loughlin, Minister for Lands, returned last month from his tour of the Western Division, and stated on arrival that the dingo pest represented a most serious and urgent problem, and upon its solution depended the continued existence of the sheepmen in the north-west of the State. This is common knowledge, but now that the Minister for Lands has seen with his own eyes what the position is, something may at last be done. The maintenance and dog proofing of the border fences and erection of check fences are the first necessity.

Credit Societies for Farmers.

The Acting Premier announced the other day that it is intended next session to introduce a Rural Credits Bill to give primary producers a legal status as credit societies.

The Government would probably appoint, for a year or two at any rate, an official to travel the country and instruct farmers in the formation of credit societies. These societies, however, must be formed by the farmers themselves, and the Government would not be responsible for financing them. Possibly the 140 agricultural bureaux, formed comparatively recently all over New South Wales, would constitute a nucleus.

Conservation of Fodder.

With a view to preventing, or at least lessening the fodder shortage in future droughts, the State Government convened last month a meeting of representative men, who were fully conscious of the gravity of the matter, to consider what steps should be taken. A committee composed of primary producers and stockowners has been appointed to draft a workable scheme which may be adopted by the Government. It will necessitate the creation of a large capital fund, and the ramifications of the operations that will have to be established will be extensive, but it is generally admitted that the undertaking, however much it may involve in actual expenditure, is a national necessity.

Veterinary Officers.

For some time past the State Government has had under consideration the necessity of introducing a bill to regulate the practice of veterinary science. The bill provides for a proper recognition of duly qualified veterinary practitioners, and also places the profession on a definite basis. The necessity for this has been apparent for very many years.

The stock branch of the Department of Agriculture has a staff of qualified men who are sent out to advise and report upon the outbreak of stock diseases in various country parts, but it can be well understood that over the immense territory of New South Wales it must be difficult to get these officers from the Sydney headquarters out to remote centres in time to report upon the disease in its early stages. Then again there are only six officers at the disposal of the department, and any very large outbreak of disease would tax the staff unduly, and would mean that the outbreak would probably spread through want of immediate scientific control.

Professor J. Douglas Stewart, of the Veterinary School of the Sydney University, referring to the matter last week, said:—

"To my mind the solution of the difficulty is the appointment of resident veterinary officers to the more important pastoral districts of the State. The stock problems peculiar to the district

could then be fully investigated, and the health of the stock within the district more closely safeguarded than is possible under the present arrangement. The recent decision of the Minister for Agriculture to appoint in future, as far as practicable, qualified veterinary surgeons as stock inspectors, will in time provide for a more thorough supervision over the health of the stock, and admit of a more rapid improvement of animal husbandry."

Live Stock and Produce Markets.

Since last month's report there have been eight sale days at Homebush, during which 156,498 sheep and 17,764 head of cattle changed hands.

The closing quotations were:—Sheep.—Prime Merino wethers to 21s., extra prime to 20s., good to 16s., prime ewes to 15s., extra prime to 17s., crossbred wethers to 20s., extra prime to 20s., good to 16s. Cattle.—Prime heavy bullocks to £14, extra prime to £15, medium to £13, prime cows to £8, extra prime to £10.

Sheepskins.—Quotations:—Merino, full wools, best 7d. to 8½d. per lb., ordinary 5d. to 6½d.; medium wools, 4d. to 6½d.; short wools, 2d. to 4½d.; pelts, ½d. to 1½d. Crossbreds (medium to fine quality), full wools, best 4d. to 5½d., ordinary 2½d. to 3½d.; short to medium wools, 1½d. to 4½d.; pelts, ½d. to 1½d. Lincolns and coarse crossbreds, 1d. to 2½d.

Hides.—Quotations:—New South Wales butchers' hides, extra stout picked heavyweights, to 18d. per lb.; heavyweights (over 52 lbs.), best condition 8d. to 9½d., ordinary 6d. to 7½d.; medium weights (46 to 50 lbs.), best 5½d. to 6½d., ordinary 5d. to 5½d.; light medium weights (40 to 44 lbs.), best 5½d. to 6½d., ordinary 4½d. to 5½d.; lightweight (30 to 38 lbs.), best 5½d. to 7½d., ordinary 4½d. to 5½d.; cut hides, 3½d. to 6½d.; faulty, 3d. to 4½d.; dry hides, to 6½d.; bulls, to 3½d.; calfskins, to 8s. 6d. each; yearlings, to 20s.; horsehides, to 16s.

Victoria.

MELBOURNE, 9th June, 1921.

The season has broken at last, and the whole of the State been visited by most welcome and beneficial rains. The break came shortly after the May issue of the Review had been published. Light to steady rains commenced to fall on the 19th, and have continued to fall at intervals up to date of writing this letter. The temperature has remained mild, and crops and pastures have made good growth. The outlook for winter pastures is now good, as also is the prospect of another bountiful harvest. Stock are generally in fair to good condition. The rainfall for May was well above the average in every district of the State.

The wheat harvest has now been shifted to the coast. A striking example of what can be accomplished with wheat in the Mallee is afforded by the results of the last season's harvest between Ouyen and the South Australian border. At the stations on the Ouyen-Murrayville line 1,250,000 bags have been delivered to the pooling agents, and the wheat at the current price of scrip is worth 21s. a bag, the total value of the grain being £1,312,500. A few years ago this country was a wilderness. There are large tracts of similar land, equally suitable for wheat growing, still waiting development.

Gippsland.

Representatives of various municipalities laid several requests for railway extension in Gippsland before the Minister for Railways. The two leading requests were for:—(1) The extension of the present line from Orbost to the New South Wales border; (2) the construction of a line from Bruthen to Omeo.

The Minister said, in regard to number one, that he had recently visited the district, and had not been favourably impressed with its possibilities. If he were living in the district he would not deem it advisable or diplomatic to approach the Railways Standing Committee at this juncture. It would have to face the fact that money could not be got under 6 per cent., and the Orbost proposal involved the expenditure of £1,000,000, carrying an interest charge of over £60,000 per annum. He would, however, include the proposed line in a list he was preparing for submission to the Cabinet.

In respect to two, he said that the Standing Committee had recommended that the work be not undertaken, owing to the enormous cost under present conditions, estimated at about £1,000,000. After visiting the district, however, he (the Minister)

was much impressed with the country, and he would authorise a permanent survey of the route from Bruthen to Tambo Crossing, and from Bruthen to Ensay.

Soldier Settlement.

According to a recent return issued by the Closer Settlement Board, approximately 1,534,000 acres have been purchased for soldier settlement at a cost of £11,300,000. In addition to this advances have been made amounting to over £2,336,000, making a total expenditure on account of the soldier settlers in Victoria of some £13,636,000. Out of 18,499 applications for land, 14,642 were granted qualification certificates, while the total number of the applicants actually settled on the land was 7656.

Mr. Angus, Assistant Minister for Lands, recently inspected Crown lands in various districts, and as a result surveyors are now preparing subdivision plans of areas located in the north-east Murray River frontages and the Mallee. The chairman, Mr. McIvor, of the Closer Settlement Board, states that 850 blocks of Crown lands in the Mallee would be available in the projected subdivisions this year. A further area of 400 blocks would be made available within two years if the necessary railway extensions were made. In the Murray frontages about 200 blocks, suitable for grazing and mixed farming, would be obtained. Crown lands would be sold at low rates, but it was proposed to put some "loading" on the land for roads. This would enable the Closer Settlement Board to contribute towards the cost of making roads into Crown lands. The board would make liberal advances to new settlers on Crown lands for the establishment of homesteads, the erection of secure fences and for general development.

Rabbits and Weeds.

A deputation representative of various municipal bodies and organisations interested in the pastoral industry had an interview with the Minister for Lands regarding the proposed legislation dealing with pests and noxious weeds. Resolutions adopted at a conference were submitted to Mr. Oman, the Minister. It was suggested that a board of three should be appointed on the lines of the Country Roads Board, and a statement made that "no bill will be acceptable unless the Ministry accepts entire responsibility with regard to the control of noxious weeds and rabbits on Crown lands." Exception was taken by Mr. Oman to the term "entire responsibility." He said that the Ministry could not undertake to clear up all the Crown areas in the State, because it would cost £1,000,000. A bill would be introduced as a non-party measure, appointing a central authority, the Cabinet having abandoned the idea of divisional councils.

Notes.

A bill is being drafted by the Government to establish a compulsory fund to recompense owners of cattle destroyed through being affected by pleuro-pneumonia, in which, it is understood, the annual premium will be fixed at 6d. per head.

A deputation representing the Victorian Farmers' Union waited on the Assistant Minister of Agriculture, and asked that the Government should establish a pool for oats, barley, lucerne, and maize. It was stated that the scheme had the approval of the majority of farmers in New South Wales and Victoria. With the idea of stabilising prices, conserving fodder during good seasons for periods of drought, and thus saving for the country the tremendous quantity of stock which is lost at these times, the Government was asked to build silos throughout the country, and make advances to the farmers on the carry-over each year, which would be utilised in times of drought, the Government then recouping itself for previous expenditure. The suggested pool would be compulsory. The Minister was rather nonplussed as to how the scheme was to be financed, but promised to go into the matter.

According to the returns prepared by the Government Statist, there were considerably less stock in the State on the 31st March, 1921, than on the same date of last year. Of horses there were 187,503, a decrease of 26,000; cattle 1,575,159, a decrease of some 56,000; and sheep, 12,971,084, a decrease of nearly a million and a half.

Live Stock Markets.

Since last issue five sales of sheep, lambs, and cattle have been held at Newmarket, with a total offering of 157,660 sheep, 63,320 lambs, and 16,025 cattle, as against 126,290 sheep, 43,540 lambs, and 10,300 cattle for the previous month.

The following quotations are for sales held on the 8th and 9th inst.:—Crossbred wethers 25s. to 27s., ewes 20s. to 23s.; Merino wethers 22s. to 25s., ewes 21s. to 23s. 6d.; prime lambs 22s. to 25s. Best pair of bullocks, £16 10s. to £19; best pair of cows, £13 to £14 7s. 6d.

Queensland.

BRISBANE, 7th June, 1921.

SOUTHERN.

Generally speaking, the conditions remain favourable. The winter may be looked upon as a wet one, as rain falls at frequent intervals in one part of the State or the other. The dry belt extending from south of the Gulf to the Darling Downs has been partly relieved, but as the storms were electric, the precipitation was erratic in distribution. However, some rain fell out towards Goondiwindi and St. George, where the weather had been fairly dry, and on part of the northern Darling Downs, but the amount was not at all sufficient for requirements. The Downs proper has been very dry country, except at the Toowoomba end, which is beautifully green. The south-west division got rain only at the end of May, though the conditions there were not at all bad. Windorah had 306 points, Cowley 160, Thargomindah 108, Eulo 110, and Cunnamulla 135. The coastal belt had fairly good rains, except on the southern end, where the rains have not been sufficient for the winter fodder crops.

[10th June.—Heavy general rains have fallen, particularly in the central division, Darling Downs, Maranoa, and Warrego during the last few days. There have also been good registrations in the far west and parts of the northern division, but the falls petered out in Carpentaria and the Peninsula.—Ed. "P.R."]

Stock on the Move.

A large number of stock are being sent away from Queensland to the Adelaide market. It was reported at Charleville recently that 1900 bullocks had been sold from Burleigh Station, North Queensland, and that they were spelling near Birdsville. They are in forward condition. Kamilaroi Station intends to travel some thousands of cattle to southern Queensland this winter. Some 12,000 wethers have been sold on behalf of Thylungra Station, near Adavale, and 10,000 wethers from Ambathala Station.

Wheat Crop.

In view of the dry weather that has been experienced on the Darling Downs, and the difficulty of dealing with the record crop of last year, some of which is not yet off the farms, and also in consequence of the reduced price that will be available, it is likely that the wheat crop this season will not be so great as last year. The local wheat pool so far has issued about 4500 certificates, involving a payment of over half a million based on a first advance of 5s. per bushel. A large quantity of the surplus wheat has been exported. The chairman of the wheat pool states that last year's crop was 4,500,000 bushels. Of this it is proposed to export 1,000,000 bushels.

A Secret Conference.

A conference of officers of the Lands Department was recently held. No details of the gathering were made public, except that it was intended to secure uniformity in assessment by the officers in connection with the preparation of reports for the Land Court in fixing the rents of grazing and pastoral holdings. It has been said that behind the conference was the dissatisfaction of the Government at the rents secured on pastoral holdings, a rather extraordinary state of affairs considering the big increases that have been granted—increases altogether out of proportion to the present conditions of the industry.

Live Stock in Queensland.

The Government Statistician (Mr. N. J. Macleod) has issued the following preliminary statement showing the number of live stock in Queensland on 1st January, together with the increase or decrease on last year's figures:—

	Horses.	Cattle.	Sheep.
Preliminary, 1st January, 1921 ..	741,487	6,610,125	16,596,803
Actual, 1st January, 1920 ..	731,705	5,940,433	17,379,332
Increase	9,782	669,692	—
Decrease	—	—	782,529

Several returns are outstanding which, when received, may alter the decrease in sheep.

Unemployment.

The conditions of the pastoral industry, owing to the drop in prices, combined with the high rates fixed by the Arbitration Court, tend towards unemployment. Naturally, stations are using as little labour as possible. A number of the men in the west are making for the coast.

Western Loading.

The Charleville branch of the Inland Transport Workers' Union has decided to take a ballot of the members on the question of loading teams in rotation. The majority are said to be in favour of the proposal. The subject is a vexed one among carriers.

Later.—Subsequently the general secretary of carriers served notice on the Warrego Graziers' Association that no teams should be allowed to load twice at a station during the shearing operations if any other teams are available. It is contended that this rule has been in existence for a number of years, but has not been enforced hitherto.

Brisbane Exhibition.

The secretary has reported to the Royal National Association that the demands on space for the coming show have beaten all records. For the one farm and district exhibits 30 per cent. more room will be required. Extensive improvements are being made to the grounds and to regulate admission.

State Meat Works.

The Government is retrenching at the State meat works at Charleville, where a number of men have received notice of their dismissals. A number of men are also being sent away from the State station at Dillalah. If this were a private concern we should hear remarks regarding repudiation and probably a strike to have the men restored to their berths.

Stock Markets.

Four sales were held at Enoggera during May, a total of 18,200 sheep, 2850 lambs, 3700 cattle, and 836 calves being disposed of.

The following are the latest quotations:—Three-quarter-woolled Merino wethers, 14s. 6d. to 19s. 3d.; half-woolled Merino wethers, 14s. to 17s. 3d.; quarter-woolled Merino wethers, 13s. to 18s. 3d.; full-woolled crossbred wethers, to 17s.; half-woolled crossbred wethers, 16s. to 20s.; short-woolled crossbred wethers, to 19s.; full-woolled crossbred ewes, 15s. 6d. to 20s.; prime heavy lambs, 14s. to 17s. 3d.; good lambs, 10s. 6d. to 13s.; light lambs, 6s. 6d. to 9s.; prime heavy bullocks, to £14 17s. 6d.; prime bullocks, £10 5s. to £12; good bullocks, £9 to £10; light bullocks, £6 to £8; prime heavy cows, £7 7s. 6d. to £8 17s. 6d.; prime cows, £5 15s. to £7; good cows, £4 10s. to £5 10s.; light cows, £3 to £4; calves, weaners and vealers, 6s. to 48s.

In the stock market in the west matters are dull. Fat cattle are available, but the prices do not tempt sales. Store cattle are practically unsaleable. The horse market in the west is very poor, but, strange to say, fair prices—in fact, good under the circumstances—have been obtained at sales in Brisbane. Anything scrubby is rejected, but horses with quality are bringing quite reasonable prices.

CENTRAL.

The conditions in the central west are most satisfactory. There was not a great deal of rain last month—what there was was scattered—but there is plenty of grass and water. The growth of blue grass this year is the best for thirty years. The plains are covered with it. The grass is likely to last for months, so that there will be no difficulty in carrying the stock through the winter. On the coastal area there has been good rain, and the pastures are in excellent condition.

Land Ballot.

For areas on Westland there were 293 applicants for one portion, secured by A. H. Sexton, Muckadilla; 190 applicants for another obtained by Augustine Reilly, Longreach; 186 applicants for a third portion, for which A. W. Grey, of New South Wales, was successful; and 120 for the fourth block, successful applicant, Basil S. Moore, N.S.W.

For the first four months of the year the number of selections in the whole State was 635 for 921,000 acres, as compared with 715 selections for 1,802,000 acres in the same period of last year.

State Slaughter Yards.

The Government is now taking steps to acquire slaughter yards in districts where State meat shops have been established, and which cannot be reached with meat from the meat works. The State will purchase its own cattle in the

open market. The Minister recently said:—"My policy is to extend the idea to all centres where we are operating—that is, wherever it is practicable. By practicable, I mean where it will pay to do so. We are already supplying fresh meat, that is meat not frozen, in Brisbane, Rockhampton and Cairns, and we propose to do the same at Townsville. We are buying freely in the Brisbane stock yards for slaughter locally to supply the State shops with fresh meat."

Central and Northern Graziers.

At the annual conference of the Central and Northern Graziers' Association, held at Longreach, Mr. R. H. Edkins was elected president.

A resolution was passed to the effect that a district council, with headquarters at Rockhampton, be formed for Banana, Gladstone, Mackay, and Rockhampton districts to deal with local matters affecting the cattle industry, such district council to be constituted by three representatives from each district committee in the territory covered by the district council.

A similar resolution was passed creating a district council for the north, with headquarters at Townsville.

The United Graziers' Association was asked to secure the amendment of the tick regulations so as to allow stock through to New South Wales on two dippings in twenty-one days under departmental supervision.

North Coast Railway.

The St. Lawrence section of the north coast railway was opened on 4th June. The line so far has cost £3,000,000, and it is estimated that it will take another million to finish it. A motor service has been provided to bridge the gap in the line and traffic between south and north. The line is under way at various points, and by the end of the year it is expected that communication will be completed to Mackay.

NORTHERN.

The pastoral districts of the north are in an excellent state, and stock are able to move freely. The stock routes are open, and likely to remain so. A little rain was experienced in parts of the western areas during May. On the coast the weather has been exceedingly wet—so much so that a good deal of damage has been done to the cane crops, and planting has been interrupted time after time. Altogether the position from a stock point of view, except for prices, is quite good.

Sugar Crop.

The general superintendent of Sugar Experiment Stations, after an extended tour of the sugar districts, states that the prospects of a record crop have been discounted by the excessive wet in some of the principal sugar districts of the far north, damage by grubs in the Cairns district, and insufficient rain on the lower Burdekin. Still, the crop will be a good one. Mackay shows up well, and should harvest from 45,000 to 50,000 tons of sugar. New land is being brought under cultivation, especially along the new railway towards Rockhampton. In the Babinda district upwards of 186 inches of rain fell during the year to the middle of May. In the Innisfail district the fall amounted to 136 inches. This led to some deterioration of the cane.

Stock Route to the Territory.

The contractor for sinking bores between Anthony's Lagoon and Newcastle Waters, Mr. Sydney Peacock, recently left Cloncurry for the Northern Territory. He stated that six bores have already been put down, and windmills will be attached to them and earth tanks excavated. Seven more bores are to be sunk on the dry stage, and it is expected that the work will be completed by the end of the year, by which time the route will be always open.

Gregory North Rabbit Board.

At the last meeting of the board it was reported by the superintendent that rabbits were becoming well established on the southern half of the western border fence, particularly for a distance of 200 miles from old Kalliduwarry Station along the Mulligan River. He said: "How to deal with them when they get a spread on out here will be a problem indeed; the only hope is to get busy before they take hold. I would suggest that no time be lost in getting into action, without which all the fence maintenance will be so much waste of the board's funds."

It was reported that during the last twelve months the Winton check fence had suffered great damage through floods, and as the board had been unable to obtain any fresh supplies of netting from the Government for some years past, the board's stock was nearly exhausted. It was mentioned that a herd of camels is being maintained for the services of officers on the board's fences.

South Australia.

ADELAIDE, 9th June, 1921.

"The country was never in better heart," says a well-known pastoralist who has lived a long life in South Australia. Another stockowner declares that he never knew such a wonderful opening for a season. The weather broke during May, and this has been followed by an exceptional downpour during the first week in June. The returns for last month show a large excess over the average for previous years at several reporting stations, and the weather map for the month of May shows a remarkably even fall. "There is not a dry spot anywhere," is the conclusion arrived at by the Weather Bureau officer, who continued to explain that it was the activity of the monsoon that brought about the break in the weather.

The pastoral areas had already had a splendid start with the summer rains, but when May opened the agricultural areas were beginning to be on the dry side. There is no doubt that a fine beginning has been given to the season, and with anything like average conditions the future should be assured for stockowners and wheatgrowers.

There is now an abundant supply of feed and water everywhere, and farmers are making every effort to push on with their seeding operations. Large quantities of fertilisers have gone into the wheatgrowing districts, and there is every expectation that the area cultivated this year will show an increase over recent years.

Reports from the pastoral districts show that the lambing has been exceptionally good, and many of the stations are reporting up to, and in some cases over, 90 per cent. With such a season as the present promises to be, there should be a considerable increase in the flocks of the State, which have been more or less stationary for some time past.

The Outlook.

The depressed feeling which was apparent a few weeks ago, owing to the slump in wool prices, was of short duration, and with such a fine opening to the season, and a recovery in wool prices, stockowners feel more confident in the future of their industry. A resumption of meat exports, which would help to steady the meat markets, would be acceptable, but pastoralists feel that they have no reason to be unusually apprehensive concerning the future.

The bulk of the wool grown in South Australia is good quality Merino, and for such as is offering fair competition is being experienced. Lessees in the outback country are busy improving their water supplies, and some have resumed fencing against vermin.

North-South Railway.

Very little interest is being taken in South Australia in the inspection of the north-south railway route by members of the Federal Parliament. It is generally felt that the trip and the expense connected with it are quite unnecessary in view of the information that is available on the spot. Apart from that, South Australians feel that there is a definite contract existing between the State and the Commonwealth, and that the honourable carrying out of this contract does not depend one way or the other on the opinion of politicians, who have no knowledge of pastoral country or pastoral conditions.

Live Stock and the Railways.

The system of carrying live stock on the State-owned railways is always a controversial subject in this State, owners contending that the animals are badly knocked about, that stock trains take too long on the journey, while the general public feel that unnecessary cruelty prevails. The subject came up for consideration once more at the annual meeting of the Society for the Prevention of Cruelty to Animals, and His Excellency the Governor looked at the question through the eyes of an experienced stockowner. He criticised the facilities provided, and said in his travels about the country he felt indignant at the manner in which he saw stock handled and carried by the Railway Department. Sir Lance-

lot Stirling, who has been a stockbreeder all his life, supported these remarks, and the general opinion was that something should be done to improve conditions. It is doubtful whether these strong expressions of opinion will carry very much weight, as the subject has been discussed for many years without any remedies being applied.

General.

A deputation from the Stockowners' Association has waited on the Commissioner of Crown Lands with a request that existing stock routes in the north should be preserved, that better water supplies should be provided, and that more money should be spent on roads outside district councils. It was pointed out that it was a mistaken policy to lease stock routes or in any way interfere with routes required for the travelling of sheep. The Minister, in reply, pointed out that no stock routes were resumed without the consent of both Houses of Parliament, and as stockowners were well represented in both Houses, the case against any leasing can be fully stated. In some instances he thought that the leases served to protect the stock routes. The Government was finding it difficult to obtain land suitable for soldiers, and stock routes that were not being used occasionally offered a good opportunity of settlement. He would do his utmost to provide water facilities along the stock routes.

The Minister of Agriculture has decided to close the Turretfield Stud Farm on the grounds that the 2000 acres of good country can be more advantageously utilised than in the running of stud cattle. The stock has been sold, and the Agricultural Department will utilise the property for experimental purposes.

A few cases of pleuro have been reported amongst dairy cows, but the Stock Department have the matter well in hand, and report that there is no danger of any serious outbreak.

Live Stock Markets.

The bulk of the cattle yarded at the last sales came from Queensland, New South Wales, and the far north of South Australia. Although the yarding was a large one the demand was equal to the supplies, and prices on the whole were well maintained.

Sheep were in fair demand, and competition was keen for the best lots offering.

Quotations closed this week on the following basis:—Cattle.—Prime bullocks £13 to £15, good £10 10s. to £12; prime cows £7 10s. to £10, good £5 to £7. Sheep.—Prime Merino wethers £1 10s. 6d. to £1 14s. 6d., good £1 6s. to £1 9s.; prime Merino ewes £1 7s. to £1 11s., good £1 2s. to £1 6s. 6d.; prime crossbred wethers £1 9s. to £1 13s., good £1 6s. to £1 8s.; prime crossbred ewes £1 5s. to £1 9s., good £1 1s. to £1 4s.; prime lambs £1 7s. to £1 11s. 6d., good £1 3s. 6d. to £1 6s. 6d.

Western Australia.

PERTH, 1st June, 1921.

May has proved a remarkable month. My rain gauge has shown only about four days without some rain, and the total for the month is about 10 inches. This is merely stated as an indication of the rainy conditions in the metropolitan area. The important fact from an agricultural point of view is the pleasure in being able to record that practically there is no district of the State where records are kept which has not received more or less bountiful rains. The weather conditions have been entirely unusual. The winter type of weather map started in the last days of April, and gradually during the month the antarctic lows crept farther and farther north until they reached the country which is generally spoken of as the Murchison, but is known to the Weather Bureau as East Gascoyne and North-eastern. Usually the winter rains do not reach further north than the districts mentioned, and for several seasons have not gone as far north; but towards the end of May they penetrated right to the north coast, and heavy rains were recorded at Marble Bar, Port Hedland, and Broome.

These rains, following the abundant monsoonal falls of the summer months, have produced quite an unusual and remarkable condition of things. The Railway Department states that May holds the record for the number of washaways which have occurred on the railways. At the present time trains are not able to get through in the central part of the Wongan-Mullewa line, and there has been difficulty on the Meekatharra line. The Premier started about a fortnight ago for an overland trip to the north-west, and met with considerable trouble at various places

on account of the rain. At present he appears to be marooned somewhere in the neighbourhood of Marble Bar or Port Hedland, and has had to abandon the land trip, and the last heard of him was that he was proceeding up the coast in a lugger.

An important, perhaps the most important, result of the rains is that the East Gascoyne—or as they are generally termed, the Murchison—pastoralists are rejoicing exceedingly, the only fly in their ointment being the price of wool. Some who put the rams into their flocks early lost lambs before the rains came; but the majority of experienced men state that the rains are in ample time for their lambing, and they expect splendid results. The rains will open up all the stock routes, and in six weeks or so fat stock should be available from the districts under consideration.

Stock Market.

The supplies of sheep for the first part of the month were of poor quality, but from the agricultural districts receiving early rains better supplies commenced to arrive at the Metropolitan Market in the middle of May. The present price for prime mutton is about 8½d., and for medium ewes 5½d. The first shipment of 5000 fat sheep from Carnarvon should be available for sale on 8th June, and it is expected that the shipments will arrive with such regularity as the steamer service will allow up to the end of July. As the West Gascoyne, of which Carnarvon is the shipping centre, received abundant summer rains, the quality is said to be prime. A good many of the sheep have been sold privately, but their presence in the metropolitan area will affect the market. By the time these shipments cease the Murchison stuff should be ready, so that there should be abundant supplies of mutton from now forward, and prices will probably ease.

With regard to cattle, about 2500 to 3000 are arriving at Fremantle each month, 90 per cent. being from Kimberley and shipped at Derby. They are arriving in fairly good condition, and so far have sold well. At the present time prime beef is bringing about 55s. per 100 lbs., or say 6½d. per lb., down to about 5½d. per lb. for poorer stuff. The market has been steady for several weeks. It may be mentioned that the third and fourth week in March beef jumped from 6½d. to about 8d., and the first week in April it rose to 8½d. This was followed by a rapid fall to 6d. in about the middle of April. It remained at this price for three weeks, then there was a slight rise to present steady values.

Wyndham Meat Works.

The trouble with these works is largely due to lack of knowledge, and want of a settled policy. The killing portions are capable of dealing with about 30,000 head of cattle in the season of five months, but the cold storage accommodation at present only provides for about 1100 carcasses. In order that the works may be kept going under present conditions, there must be a boat every three or four weeks. It is proposed to increase the storage accommodation to about four times its present capacity.

The Wyndham Meat Works were originally conceived partly or largely as a means of supplying the Perth market with chilled beef. As a matter of fact, the Wyndham works are entirely an export proposition, and, as they are entirely out of the line of suitable shipping traffic, it is necessary to make special provision for the shipment of carcasses. Arrangements had been made with the Federal Government for their refrigerated steamers to call at Wyndham and take away the produce this season, but in the meantime several things happened.

In the first place, the market for frozen meat slumped terribly, rendering it unprofitable to carry on the works and give the growers what they considered a payable price. Second, the coal strike upset the programme in regard to the Commonwealth ships. These were the two main factors. If the shipping had been available and the market price had kept up, the management might have been able to meet the demand of the workmen for extra wages. It may be mentioned that the basic wage for an unskilled labourer at Wyndham is 21s. 4d. a day for 8 hours. Multiply this by 5½, and we get £5 17s. 4d. as the basic weekly wage for 44 hours. The demand was for £1 2s. extra, making the basic wage for unskilled labour £6 19s. 4d., skilled labour to be paid in proportion. The management under the agreement has also to provide for board and residence at 25s. a week, and the men have to provide homes for their families in the South.

There is one thing which is most commendable about the Wyndham management, and that is the great care exercised not to enter into controversy or to do anything which will lead to

trouble. From what has been said, it will be seen that the real cause of the stoppage was not so much the demand for extra wages, as that it came when other factors rendered it difficult to carry on the works under the old tariff.

Shearing.

The secretary of the Pastoralists' Association has stated publicly, and assures me that shearing is going on with customary regularity on the 1920 rates decided upon by the association some time ago, and referred to in a previous letter. The secretary of the Shearers' Union has written to the "West Australian" stating that a number of sheds are paying the new Union rates. He apparently wants to draw the secretary of the association into a controversy and obtain information, but he has signally failed.

Next Year's Wheat Crop.

It is yet too early to give any reliable idea as to the area likely to be put under cereal crops this season. Of course the major part of the seeding in the earlier districts has already been completed, but work is held up in the later districts by the heavy and continuous rains, which are also interfering badly with following operations. It always follows that, when the winter weather conditions are sufficiently severe to carry the rains well up into the East Gascoyne and North-eastern Goldfields country, they are excessive over the southern portion of the wheat belt. A paragraph published in the "West Australian" on 12th May showed that up to the end of March the amount of superphosphate carried into the wheat areas was 17,880 tons more than during the same period of 1920. From this it was concluded that there would be a considerable increase in area under crop. Unfortunately the argument does not hold, because it has been the endeavour both of the Railway Department and of the fertiliser manufacturers to get the super away early in order that the farmers may take it away as back-carting when delivering wheat. In order to facilitate this, the fertiliser people did not date any deliveries before the end of April. It is probable that there will be an increased area, but what it is no one can at present forecast.

Royal Commission on Taxation.

During the month the members of the Royal Commission on Federal Taxation visited Perth, and spent some thirteen days and two evenings taking evidence. Spoken to after they had completed their work, some of the members expressed themselves as highly pleased with the nature of the evidence they had been able to procure. This was particularly the case in regard to the witnesses who attended on behalf of the pastoral and mining industries.

Tasmania.

LAUNCESTON, 6th June, 1921.

Up to the end of May the weather conditions for the time of season have been the mildest experienced for many years, just as in the south they have been the driest. Some landowners in that part of the State have even been short of water for their stock. A rain at the end of last month has given a water supply and soaked the ground sufficiently for cultivation. The midlands have been in much the same position, but both crops and grass are now making fair growth.

In the north and north-western divisions there has been ample rain for some time past, and with mild weather the crops have been making good growth. The early crops that were put in before the good rain arrived came up so badly that the later sown crops are now looking better than them. As a late start was made with sowing the work is still proceeding, and as conditions have been so favourable there will, after all, be something like an average sowing.

Pastures have been coming on fairly well, but now the sharp frosts have started. Still the ground is drier and warmer than usual at this time of year, and there should be good growth for some time yet. Stock have held their condition well, and the outlook for winter has improved considerably.

Stock Markets.

The fat stock markets are well supplied, and prices are likely to remain fairly low, because of the opportunity of

importation of meat from Victoria. Prime steer beef is now selling to 50s. per 100 lbs., and medium quality to 45s., prime wether mutton to 6d. per lb., prime ewe mutton 4d. to 4½d. per lb., and prime lamb to 7½d. The store stock market is more active, as since the rains fattening lines are in demand. Cattle for fattening are being sought for the Straits Islands.

Stud Sheep.

Merino breeders are looking forward to a fair demand for stud sheep at the coming Sydney sales, in view of the relative values for fine wools. As a result the shipments from Tasmania are likely to be on the heavy side, but the demand for young rams has been so heavy that some studs have placed a large proportion of their available sheep privately.

Wheat Yields.

The results of the wheatgrowing competition recently announced show that heavy yields of wheat can still be obtained in Tasmania when close attention is paid to cultural conditions. The yield for the winning crop in Northern Tasmania was 54½ bushels per acre. This was grown by Mr. Arthur Hall, of Wesley Vale, the variety being Federation. Cresswell Bros., of Deloraine, and Boyes Bros., of Clarendon, had yields of 54 bushels. At Ormley, in the eastern section, Holder Bros.' crop turned out 53 bushels. In the Midlands Mr. Robert Taylor had a return of 35 bushels. Birchall Bros., of Sorell, gained the prize for Southern Tasmania, with a yield of 44½ bushels.

Centenary of Sheep Country.

An interesting event now being celebrated is the centenary of the settlement of Tasmania's famous Merino sheep country. On 31st May, 1821, Governor Macquarie named Campbell Town, and on 2nd June of the same year Ross. In 1823 grants of land were made in some large areas, and some of the old estates that are still in existence were established. In many cases they are still in the possession of the same families. The fifth generation of the Gibson family, famous as Merino sheep breeders, is now engaged in the industry.

Graziers' Federal Council.

At a meeting of pastoralists, convened by the Farmers' and Stockowners' Association, it was decided to affiliate with the Graziers' Federal Council of Australia, and Mr. R. C. Field has been appointed to represent Tasmania on the Council. At the same meeting a committee, representative of the State, was appointed to deal with the new shearers' log. For the first time Tasmania is being joined with other States instead of having a separate agreement.

New Zealand.

(FROM OUR OWN CORRESPONDENT.)

CHRISTCHURCH, 1st June, 1921.

AUCKLAND.

The weather on the whole has been seasonable for several weeks, though there was one cold snap on the high country in the north. The dairy season being over, the quiet time of year has begun, and there is likely to be little movement in stock until the spring. While dairy farmers have had a good season, graziers have had one of the worst on record, both for sheep and cattle, owing to the failure of the markets, and high cost. The slump in beef has hit the cattle men very hard, and the outlook for export is anything but good, so that there is little or no demand for cattle for next season's fattening.

Cost of Nauru Phosphate.

The Prime Minister, during the late session of Parliament, stated that the Nauru phosphate rock would be landed in the Dominion at £4 5s. per ton, that crushing would entail a further charge of 12s. 6d. per ton, and that if another 10s. per ton were added, it would give an idea of the cost of the ground rock to the farmer. This gives a total of £5 7s. 6d. According to a statement made by the manager of the New Zealand Fertiliser Company, Auckland, however, farmers will have to pay considerably more than the price indicated by Mr. Massey for any preparation

that will be of much value to them. This authority thinks the ground rock will give no adequate results unless it is scientifically treated and converted into superphosphates. This is the form in which most purchasers wish to have it, and its conversion is a fairly expensive process. Only 2½ per cent. of the ground rock is soluble, but when it is treated it is all available. The Prime Minister's estimate, it is said, did not take into account the cost of bagging, railage, wharfage, stevedoring charges, and other incidental charges. The Nauru product is being sold at £8 10s. to £9 10s. a ton as a superphosphate, and at considerably above the Minister's estimate in the ground form.

TARANAKI.

The pastures are more or less bare, as the rain that broke up the dry autumn was followed too soon by cold weather. Those farmers who have swedes and good hay stacks to fall back upon will be able to bring their stock through the winter alright. Although last season's prices for butter and cheese are not looked for, still the prospects are looked upon as fairly good. Dairy cows to come in during the spring are maintaining their values, and two-year-old grade Jersey heifers are selling up to £25. A large quantity of basic slag is being landed, as this fertiliser is specially suited for top dressing pastures in Taranaki, the bulk of which have never been ploughed.

HAWKES BAY.

In spite of the rains that fell during the month, the greater part of the Hawkes Bay province still presents a brown appearance, and owing to the scarcity of feed, stock are generally in low condition. A cold snap left a covering of snow on the ranges. The dairying districts in Southern Hawkes Bay look very much better, as there is always a better rainfall in what was formerly heavy bush country. Sheep owners are holding on to their sheep at the low prices, and consequently values are a little firmer. Other districts that are understocked and have the feed are on the look out for sheep, which are looked upon as worth buying at present prices, seeing that there is a much worse prospect for beef.

East Coast Railway.

A matter of great importance to Hawkes Bay and Poverty Bay districts is the completion of the East Coast railway line between Napier and Gisborne. The Hon. J. G. Coates, Minister for Public Works, who has just been over the route, says he will not be able to tackle anything like progressive work there for a couple of years. He hoped by then to have cleared enough lines to be able to tackle the East Coast line in earnest.

WELLINGTON.

The rain during the month has improved most parts of the province, and enabled cultivation work to be proceeded with, especially on the West Coast. A larger amount of land is being turned over in the Manawatu than has ever been the case before. This mainly is in preparation for wheat-sowing, and it is expected the area under this crop in the Feilding, Rangitikei, and Marton districts will easily beat all previous records. The assurance of a good price, the uncertain position of wool and meat, and the easing of the butter market have combined in turning the attention of many farmers, who scarcely had given it a thought before, to the possibilities of wheat-growing.

Imperial Government Wool in Store.

The wool held in New Zealand stores on account of the Imperial Government at the end of April amounted to 314,890 bales, comprising 194,657 bales of brokers' wool, 21,059 bales of Government slipe wool, 49,972 bales of Government scoured wool, and 49,202 bales of freezing companies' slipe wool.

Losses in Sheep.

It is reported that several large forward buyers of sheep in the North Island have struck serious financial trouble owing to the fall in values. In his bankruptcy proceedings one farmer said he had bought 4000 lambs for forward delivery at prices between 20s. and 24s. 6d. per head. He got one draft of these away fat for 24s. 6d., and consequently, owing to the falling market, the balance had to be disposed of at prices ranging from 15s. down to 3s. per head. A line of 1000 ewes was bought at 30s. per head: he sold 350 at 12s., and the rest were not disposed of. Heifers and calves bought previously were sold at prices at about one-third of the original cost.

Proposed Producers' Shipping Line.

Regarding the scheme adopted at a recent meeting of the Producers' Committee respecting the establishment of a producers' line of steamers, the details were unfolded to the Acting-Prime Minister, who said he would lay the scheme before Cabinet. Sir Francis Bell stated that the scheme had not yet been considered by Cabinet, but it would be as soon as possible. It would require a full Cabinet to deal with such a matter. Resolutions, principally by branches of the Farmers' Union, continue to be passed in favour of the proposal. On the other hand the executive of the Canterbury Sheep Owners' Union has resolved to support another proposal that is on foot, as being the only reasonable scheme to go on with at present, namely, the forming of a company to charter ships for the carriage of produce. The executive was also entirely against the principle of taxation for the purpose of owning ships at the present time. The executive also asked that the Government should make an effort during the next session of Parliament to reduce taxation.

North Island Store Stock Values.

There has been a firmer tone in the stock markets during the past fortnight, and it is evidently being realised that the bottom has been reached. Sheep are, however, in better demand than cattle. In the Auckland province 3 and 3½ year stores are selling at £6 to £7; 2½ years, £3 10s. to £4 10s.; 18 months, £1 10s. to £3; heifers, 18 months, £1 10s. to £2 10s.; heifers, two years, £4 15s. to £6 10s.; calves, best, 15s. to £1 1s.; wethers, prime, 18s. to 22s. 6d.; medium, 15s. to 17s.; forward 4-tooth, 14s. to 17s.; forward 2-tooth, 12s. to 15s.; lambs, fat, 14s. to 16s. 6d.; lambs, store, shorn, best, 7s. 6d. to 11s.; medium, 5s. to 7s. In the Poverty Bay district there is rather an upward move in values, forward wethers making from 16s. to 19s. and four-year-old ewes to 18s. In the Wanganui area sheep sold much better. Forward lambs brought 9s., forward wethers 12s. 9d. to 15s., in-lamb ewes (four-year-olds) to 12s. 9d., while dairy cattle are very saleable at firm rates. In the Wairarapa there is an improved inquiry. Lambs sold at 6s. to 9s., small from 4s., wethers 12s. to 14s., in-lamb four-year-old ewes 12s. to 14s., three-year-old and four-year-old bullocks £5 8s., two-year-olds from £2 5s., year-and-a-half-old steers £1 to £2, and springing heifers £9 10s. In Hawkes Bay there is a better tone. Wethers made from 12s. to 14s. and medium in-lamb ewes 8s. Cattle are quiet, in-calf heifers making £3 to £4, three-year-old to four-year-old steers £4 to £5 8s., two-year-old steers £2, and springing heifers £7.

CANTERBURY AND MARLBOROUGH.

There have been good rains in North Canterbury, but it is still very dry in the southern part of the province, the soil never having been thoroughly saturated since the spring rains. Feed has recovered in the north, whilst it is very bare in the south. The root crops will be barely sufficient to last through the winter, particularly if the weather becomes severe. The probabilities are, however, for another dry winter like the last two. A good deal of the snow has gone off the ranges through the rain or the warmth of the sun, as this month has at times been more like summer than winter. A large area of wheat is being sown in north and mid Canterbury, but the land is not in a fit state for cultivation in the south, so that the area there will probably be no larger than last year. In those parts of the province where the feed prospects have improved there is more demand for store sheep, but store cattle are everywhere dull of sale. The winter so far has been dry and mild in the Marlborough province, and although feed is scarce, stock are looking well.

Surplus Wool Profits.

It will be remembered that Mr. E. Newman, M.P., appealed to sheep owners to give their surplus wool profits to the fund for British seamen incapacitated during the war, and the Timaru Harbour Board recently wrote to Mr. Newman asking for a grant from the fund for a Sailor's Rest at Timaru. A member stated that it was time that someone insisted on particulars regarding this fund being made public. The fund contained £400,000, yet the contributors to it had never even received an acknowledgment that their money had been received, nor had they been told what had become of it, or what was to become of it.

Lucerne and Sheep Run.

The inspectors of stock in the northern district, Messrs. J. G. Scott and F. J. Sisson, report that the Bluff station in Southern Marlborough, formerly rabbit-infested, is now going back to vegetation, and cocksfoot is being sown on the hills, and on the rich flats in the Clarence Valley. A success-

ful experiment has been made in growing lucerne. The land was ploughed 5 in. deep in December last, then harrowed once, and 15 lbs. of second-class seed broadcasted on 3rd January, followed by rolling. Nothing further was done to it, nor was manure of any kind used. This land is over 1600 ft. above sea-level, and is fifty miles inland. The soil is medium light, with loose subsoil of good quality for the growing of lucerne. Nothing had been done to the land for fifteen years. Another paddock has been sown in lucerne and red clover, which are doing well together. This mixture was broadcasted (surface-sown) and then harrowed, nothing further being done by way of cultivation.

Shortage of Fat Stock Anticipated.

An agricultural writer states that there is a growing opinion that fat stock will be scarce by the time spring arrives. There is not a great deal about at the present time, and the fodder crops that are not being reserved for winter were chiefly fed to lambs. What remains of these standbys will be wanted for ewes and the dry sheep that have to be held over, and there will be little to spare for actual fattening purposes. Sheep are being given more attention than cattle in so far as winter feeding is concerned, and it is not likely that South Canterbury will have any number of turnip cattle for the market later on. Usually South Canterbury supplies large numbers for the Addington market during the winter and spring, as well as keeping up the supplies for local consumption. Well grown steers that are usually in demand at this season for turnip feeding are, however, selling no better than young stuff, and dry cows can hardly be given away. Unless Otago and Southland can supply the Canterbury markets during the end of winter and beginning of spring, as they have done before, there seems every reason for believing that supplies will be short. The south will of course require a good deal of winter feed for their ordinary hold-over stock.

Live Stock Prices.

The rains in North Canterbury during the month have improved the feed prospects, and created a better demand for store sheep, but South Canterbury is still very dry, and feed is very bare on the pastures. At Addington good forward lambs are selling at 10s. to 10s. 6d.; fair wether lambs, 7s. to 8s. 9d.; small wether, 5s. 6d. to 6s. 9d.; cull, 2s. 3d. to 5s.; good ewes, 13s. 2d.; forward, 4, 6 and 8 tooth wethers, 15s. 9d.; ordinary 4 and 6 tooth, 12s. to 13s. 9d.; 2 and 4 tooth, 11s. 6d. to 14s. 3d.; good 4, 6 and 8 tooth ewes in lamb, 15s. to 18s. 3d.; low-conditioned 4, 6 and 8 tooth and good 2-tooth ewes and coarse woolled, to 16s. 6d. Prime fat lambs are making 19s. 6d. to 26s. 3d., and medium 16s. to 19s. 3d. Prime wether mutton is selling up to 4d. per lb. over all, and at per head 20s. 9d. to 27s. 2d.; medium, 18s. to 20s. 6d.; prime ewes, 17s. 6d. to 20s. 6d.; and medium, 14s. 6d. to 17s.; prime bullocks, £13 5s. to £15 10s.; medium, £9 5s. to £13; prime heifers, £7 17s. 6d. to £10 2s. 6d.; prime cows, £7 to £15 10s. Baconers, 7d. to 7½d. per lb., and porkers 9d. to 9½d. per lb.

OTAGO AND SOUTHLAND.

There has been little rain during the month, and the land south of Dunedin is getting hard and dry for working. There is a better demand for store sheep in consequence of the fine open weather and the abundance of roots available in the south. Mature and forward well-bred bullocks have appreciated slightly, due probably to the improved value of hides and the prospect of beef being scarce and fairly high in price later on and in spring. There is very little demand for young store cattle. The wheat crops have turned out very satisfactorily both in North Otago and in the south, and a larger area is likely to be sown this year, particularly as oats are so low in price.

New Land Valuations.

The new land valuations have caused a general shock in the Southland province, and the assessment courts are promised a busy time dealing with objections. Many valuations have gone up 50 per cent. on the last figures, and some more than that. Meetings have been held in various centres, at which strong opposition has been offered to the action of the Department in raising the valuations at a time when the price of produce is so low. Returned soldiers, like the settlers, have intimated their intention of taking a stand in the matter. The Government has appointed one resident magistrate as president of the Assessment Court for the whole of New Zealand, and local bodies are protesting that this will cause great delay in hearing objections.

Live Stock Prices.

Fat stock are maintaining their prices, though offerings are fairly large. Prime beef averages about 32s. and cow beef 20s.

per 100 at Burnside market. Prime bullocks are selling at £14 10s. to £18 2s. 6d.; medium, £11 10s. to £14; prime cows and heifers, £10 2s. 6d. to £12; medium, £7 10s. to £10. Prime wether mutton is selling at 3½d. and ewe under 3d. per lb. Prime lambs, 21s. 6d. to 27s. 6d.; medium, 15s. to 17s. 9d.

South African Notes.

BLOEMFONTEIN, 1st May, 1921.

The autumn show season was recently concluded, as far as the bigger fixtures are concerned, by the show held under the auspices of the Witwatersrand Agricultural Society at Johannesburg. On the whole these shows have been highly successful, and in so far as they reflect the position of the stock industry, have testified to the remarkable advance that this industry has made of late years.

The first big cattle show of the season was at Bloemfontein. This show, as in common with others, is, of course, a general one, but at the period of the year at which it is held, caters chiefly for owners of stock, and it is as a stock show that it is chiefly regarded, especially in relation to cattle. It was rendered notable, however, for the wonderful display of Frieslands, containing as it did the picked specimens of the breed from all parts of the Union. The competition for honours was consequently very keen. The championship in the bull class went to an animal that, while not unknown in the show ring, has been little before the public eye in the sense that the two great rivals, Admiral Beattie and Rikus, have been. For some reason or other the great rivals of the breed are never pitted against each other, so which of the trio in the opinion of the judges is entitled to pre-eminence is a question still to be settled, if ever it will be. However, there was no question as to the outstanding quality of the new champion, Bloemhof Zondag, owned by a Natal breeder, Mr. Stone, whose good fortune in the face of recent adversity is thoroughly deserved. It was he who suffered the loss lately at the hands of a maliciously-minded native of some ten members of his herd, valued in round figures at about a thousand pounds apiece.

The beef breeds were not so well represented as usual, the most prominent being Shorthorns, with a sprinkling of Herefords, Aberdeen-Angus and Afrianders, the latter showing a marked degree of improvement since serious attention has been paid to its development.

Bloemfontein was the only one of all the shows where there was any competition to speak of in the sheep classes. This was not for want of enterprise, but arises from the fact that sheepmen consider this period of the year altogether unsuitable for showing sheep, as it interferes with the breeding season, and this, coming soon before shearing commences, involves risks and a certain amount of cruelty to the animals. Consensus of opinion is tending in favour of these shows being held after shearing, and no doubt that plan will be adopted and shows will be held in conjunction with stud sales, as a sheep show in itself would never attract a "gate," the revenue from which forms the chief source for financing agricultural societies in this country. Such sheep as were shown at Bloemfontein, however, reflected the general improvement that is taking place among the flocks as the result of importations from Australia, and the greater attention that is being paid to selection and culling.

The show at Johannesburg, while on a par with the Bloemfontein fixture as far as numbers were concerned, elicited more competition in the various herd classes. In addition to a splendid display of Frieslands and Shorthorns breeds, the Ayrshires, Devons, South Devons, Red Polls and Sussex were very prominent and of undoubted quality.

One of those curious inconsistencies that sometimes happen at shows, and which serve to puzzle show visitors at times, occurred in connection with the award for the Phillips Cup, which is given to the animal in the cattle classes adjudged to be the best in the yard—otherwise known as grand champion. This award was given to a young imported Shorthorn bull that had only been given a second prize in his own class as a Shorthorn when judged by another adjudicator, and whose choice of a first was not even considered fit for the selection made for choice of grand

champion. So the spectacle was seen of a bull heading the parade that carried a ticket indicating that he was supreme over all the best of the company of cattle of whatever breed, while at the same time another ticket declared him to be only fit for a second place in his class as a Shorthorn.

Export Trade in Frieslands.

Mr. Trevor Williams, a vice-president of the Friesland or Holstein Society of Great Britain, was recently on a visit to this country, and as the number of Frieslands we have has increased to such an extent as to necessitate new outlets if values and demand are to be maintained, the opportunity was regarded as a good one for impressing upon the visitor the excellent opportunity now afforded for British breeders to get new blood for their own herds, especially in view of the fact that foot and mouth disease had cut off supplies from Holland and Europe generally.

Mr. Williams was taken on tour through the greater part of South Africa, saw all the leading herds, and was no doubt greatly impressed. He declared at the annual meeting of the Friesland Society that South African breeders had produced a class and stamp of Friesland that he had hardly any hesitation in saying was the best in the world, and of which they had every reason to be proud—that was as far as constitution and conformation were concerned. But, he told his audience, while British breeders wanted constitution they also required performance, and there would be no possible hope of getting buyers unless the certificate of pedigree was accompanied by a certificate of maximum performance.

This announcement came as a disappointment to a good many, for there is no getting away from the fact that the majority of our breeders have been paying more attention to points that count in the show ring than those that make for milk production. In proof of this it was stated at the meeting that only forty members of the six hundred who belong to the association were participating in the official milk recording scheme.

Argentina.

(FROM OUR OWN CORRESPONDENT.)

BUENOS AIRES, 1st April, 1921.

There is abundance of feed all over the country, and reports from all parts are very optimistic in regard to the prospects for the maize crop. As a matter of fact, we are, if anything, getting too much rain, and although the soil is in great order for the planting season, the roads are in a very bad state for getting the grain across country, and a spell of dry weather would be a good thing for the maize. Ploughing and planting for the new wheat crop are liable to start early this year, owing to the fine condition of the soil, and as a result of the frequent rains. With easy ploughing, there should be a good area under wheat.

Prices and prospective values for fat cattle and sheep are not very satisfactory, though the accompanying drop in the values of all classes of store stock will enable feeders to acquire some at a reasonable price which will leave a margin for the animal's keep.

Testing Dipping Preparations.

The Agricultural Department has lately submitted to a practical test the many varieties of sheep dips and tick eradication remedies offered to live stock owners, each, of course, recommended as the best obtainable. This test will ensure that buyers of so called efficient dips really get what they pay for, and not as has too often happened, some worthless rubbish altogether useless for the purpose. The many classes of dips on the market all have their supporters, though as a cure for scab and the most beneficial for the wool the arsenic dips are excellent, care of course being taken to continually stir the bath to prevent the heavy ingredients settling at the bottom, the results being disappointing when this precaution is neglected.

Exports of Pastoral Products.

Exports of many lines of pastoral products showed a marked falling off compared with last year. For instance,

from 1st January up to the middle of February 1920 we exported 367,521 salted ox hides, as against 193,353 this year. In dried hides the figures are respectively, 333,154 and 91,711. Not a single salted calfskin was exported this year during the period under review, as against 10,000 in 1920, and dried horse hides have amounted to a thousand odd, compared with 65,000 a year ago. "The Times of Argentina" says that a glance at the wool figures conveys the impression that the actual movement is not so far behind the standard of 1920. This year 43,337 bales were shipped, compared to 50,818 bales last year, which signifies a falling off of about only 14 per cent. in quantity. "But with the drop in price it must be evident that the country's position, as judged by its income from wool, leaves something to be desired as against the position which ruled this time last year." Allowing for a similar depreciation in the value of all skins and hides, we get some indication of the real decline of the country's export business in these important items.

Last year 108,000 tons of linseed at around \$24 for spot had been exported up to mid February. This year shipments total 95,000 tons at approximately \$15. For the 1920 period wheat shipments ran to nearly 800,000 tons. In the corresponding period of 1921 shipments amounted to only 100,000 tons odd.

Meat exports are the one line that maintain and even exceed last year's level. Mutton stands about the same, lamb shows a good increase, and beef a slight falling off.

Lincoln Importations.

This season's importations of pedigree Lincoln rams will long be remembered as one of the most disastrous in the annals of the trade of purchasing at the home shows and sales and importing such animals here for liquidation. When one considers the great benefits the great heavily woolled Lincolns have brought to this country, it is surprising the apathy shown at this season's sales. There are no buyers about, and for any animals sold ridiculous prices have to be accepted. Importers are disposed to sacrifice at any price, but not even an amount which would cover the cost of bringing these sheep out from England is offered. Fashion now favours a much finer quality wool, and coarse grades are quite out of favour.

Notes.

There has been much publicity given in the local Argentine press to the expected shipment on a large scale of live steers from this country to Germany, 300,000 head being spoken of. No doubt the enterprise will be initiated, but probably on a much smaller scale than that talked about.

The judges have already been appointed for the forthcoming Palermo Show in September. The Aberdeen-Angus classes will be judged by Dr. Beddie, Fraserborough, Scotland, who is described as a great enthusiast in matters connected with the breed. The Shorthorn judge will be Mr. Charles E. Law, The Grange, Brackla, Nairn, whose practical acquaintance with Shorthorn affairs is unrivalled in the North of Scotland.

The following is an example of the continued outlawry in the south of Santa Cruz territory, where numbers of estancias, as mentioned in my last letter, have been the objects of assault by the rebels and strikers. At one of them, four foremen and the manager, a British subject, were taken prisoners, after the establishment had been sacked, the sheep shearing machines destroyed, and the fences cut in several places.

The Spanish-Argentine company recently formed to encourage trade between these two countries have made arrangements to ship a number of live cattle along with their first shipment of produce. If this initial shipment turns out the success anticipated, further shipment of live cattle will be made to Spain, where a good market is said to exist for Argentine steers.

The estancias Santa Catalina and La Oriental, situated respectively in the Departments of San Martin and Belgrano, of the Province of Santa Fe, have been sold through the firm of Dodero Bros. for the sum of £270,000 cash down. The purchaser is Señor Francisco Muhlenkamp. The two properties have an area altogether of 20,250 acres fenced, and under alfalfa.

Live Stock Markets.

Cattle.—Bullocks, special £16 12s. 6d. to £17 10s.; good, £14 17s. 6d. to £15 15s.

Sheep.—Wethers, special £1 1s. to £1 4s. 6d., good 17s. 6d. to £1 1s.; ewes, special £1 1s. to £1 6s. 3d., good 17s. 6d. to £1 1s.; hoggets, 19s. 3d. to £1 2s. 9d.

Mule with a Foal.

The "Western Mail," Perth, send us the accompanying snapshot and letter at the request of Mr. A. Campbell, of Murray Bros. and Co., owners of Mallina Station, via Roebourne, W.A., from whom they have received same:—"Enclosed you will find snapshots of a mule bred here on Mallina Station, and her foal by the thoroughbred stallion,



The Trigger. As this is a most unusual occurrence, in fact I have only heard of one case in the world, I am sending the photo to be put in your paper. I think it will prove a most interesting item to stockbreeders, scientists, &c.

"Similar events being so rare, people have doubted their authenticity, and I have made it a point to get several prominent squatters to come and see both mare and foal; they are perfectly satisfied in their own minds that the foal belongs to the mule. The foal is a nice little filly, and shows little sign, if any, of the donkey, except regarding the feet, which are small and pointed, like those of a mule. Will you oblige me by forwarding a copy of snap and letter to 'The Pastoral Review,' Melbourne. The mule is the property of Murray Bros. and Co., Mallina Station."

Railage of Store Stock in New South Wales.

On 3rd inst. a deputation from the Graziers' Association and Homebush selling agents waited upon the Railway Commissioners in regard to the conditions pertaining to railage of store stock. The deputation consisted of Hon. A. E. Hunt, M.L.C., Dr. N. W. Kater, Messrs. J. Mackay, B. B. Allen and J. W. Allen, secretary (Graziers' Association of N.S.W.), Messrs. C. Capper, H. Slater, Geo. Maiden, M. McInerney and E. A. Chisholm, secretary Homebush selling agents.

The deputation pressed the request of the graziers' annual conference that the commissioners should delete the following clauses in their conditions for the carriage of store stock, viz.:—

"(b) (2) In the case of consignments of more than three trucks, the property of one owner, they have been pastured for not less than three months, &c."

And—"The reduced rates will not be allowed on store sheep, cattle, or goats sent to stations within a radius of 50 miles of recognised fat stock markets, viz., Flemington and Farley."

It was also pointed out that a considerable quantity of stock is being sacrificed at Flemington which would be very suitable for restocking, but that the railage to and from the country at ordinary rates made the purchase of stock prohibitive. It was suggested to the commissioners that trucks running back to the country empty might be made available for the carriage of store stock from Flemington at a purely nominal rate, which would cover the railways against any actual loss, and facilitate restocking. It was pointed out that by this means not only would stockowners benefit, but also the railways would later on probably have the railage of the same stock to market.

The commissioners were sympathetic to the suggestions of the deputation, and promised to give them full consideration.

Rainfall Returns.

EXPLANATION.

In the first column will be found the average yearly (district) rainfall, in the second the total fall to date, in the third the mean fall for the month, the fourth is the average rainfall for the next month based on the return of rainfall ever since records were taken, and in the fifth the condition of the pastures—E, excellent; G, good; F, fair; I, indifferent; B, bad.

WESTERN AUSTRALIA.

No.	Division.	Average Yearly Rainfall.	Total from 1st Jan. to 31st May.	Total Fall for May.	Average Rain-fall, June.	Pastures
		Inches.	Points.	Points.	Points.	
1	North Kimberley	27.04	2,039	15	8	E
2	East Kimberley	25.70	1,940	—	19	E
3	West Kimberley	23.26	1,760	148	77	
4	De Grey	13.59	1,469	502	132	E
5	Fortesque	9.44	1,765	448	164	E
6	West Gascoyne	9.11	1,214	545	226	E
7	East Gascoyne	9.39	627	478	141	G
8	S.W. North Coastal	17.85	895	695	388	E
9	S.W. South Coastal	36.26	1,311	901	680	F
10	S.W. Central	17.66	686	505	288	F
11	Eucia	14.35	621	532	194	G
12	South-eastern	9.95	600	539	116	G
13	North-eastern	10.23	416	402	109	G

SOUTH AUSTRALIA AND NORTHERN TERRITORY.

14	Northern Rivers	44.70	3,581	5	—	G
15	Northern Plateau	12.39	1,366	160	37	E
16	North-west	8.45	1,038	195	114	E
17	Far North	7.18	578	193	96	E
18	West of Spencer's Gulf	13.17	807	260	194	E
19	Upper North	13.30	1,189	273	190	E
20	North-east	8.48	1,112	175	106	E
21	Lower North	17.53	1,008	356	217	E
22	West-central	17.07	890	416	276	E
23	East-central	23.71	952	403	376	E
24	Murray Valley	13.08	818	250	169	E
25	Upper South-east	16.61	761	271	220	E
26	Lower South-east	25.51	584	238	391	E

QUEENSLAND.

27	Peninsula North	57.76	4,528	51	55	G
28	Peninsula South	39.67	3,779	33	37	G
29	Lower Carpentaria	28.20	2,226	21	39	G
30	Upper Carpentaria	26.02	1,500	73	79	G
31	Barron	63.85	6,919	387	180	G
32	Herbert	76.84	5,290	23	23	G
33	East-central Coast	46.96	2,413	146	191	G
34	West-central Coast	24.17	1,760	144	127	G
35	Central Highlands	25.16	1,199	108	160	G
36	Central Lowlands	19.59	924	61	116	G
37	Upper Western	15.20	955	49	45	G
38	Lower Western	11.98	1,005	139	68	G
39	Port Curtis	37.18	1,747	203	229	G
40	Moreton	49.49	2,521	212	298	G
41	East Darling Downs	28.30	892	259	183	F
42	West Darling Downs	23.84	741	225	183	F
43	Maranoa	23.67	666	177	174	G
44	Warrego	17.76	1,104	232	138	G
45	South Far-west	13.08	1,242	169	104	G

NEW SOUTH WALES.

46	Trans-Darling North	9.11	505	128	84	G
47	Trans-Darling South	9.90	861	194	115	G
48	Cis-Darling North	13.71	987	186	118	G
49	Cis-Darling South	12.44	58	163	137	G
50	Upper Bogan	17.55	860	205	162	G
51	Lower Macquarie	17.83	1,147	280	150	G
52	Western Gwydir	20.02	1,040	323	190	G
53	Eastern Gwydir	23.45	1,052	436	181	G
54	Nandewar	28.40	1,312	568	209	G
55	Liverpool Plains	26.95	1,424	417	221	G
56	West New England	31.27	1,522	591	241	G
57	East New England	36.72	2,117	530	208	G
58	Clarence	53.62	4,501	1,686	364	G
59	Orara	54.30	5,873	1,919	321	G
60	Manning	49.38	3,508	952	362	G
61	Hunter	35.01	2,494	682	270	G
62	Cudgegong	25.53	1,581	457	258	G
63	Central Plateau	34.67	2,058	603	320	G
64	Warrumbungles Highlands	27.26	1,597	370	230	G
65	Lowlands	21.92	1,181	358	208	G
66	Sydney	48.19	2,025	723	505	G
67	Nepean	31.75	1,993	463	251	G
68	Illawarra	39.92	2,723	959	376	G
69	South Coast	35.97	2,009	516	325	G
70	Upper Murrumbidgee	25.18	1,496	316	250	G
71	Snowy Mountains	40.70	1,417	311	451	G
72	Jugiong	30.26	1,200	350	305	G
73	Tumut	21.57	941	312	248	G
74	East Riverina	16.46	895	234	219	G
75	West Riverina	13.71	651	191	164	G

VICTORIA.

No.	Division.	Average Yearly Rainfall.	Total from 1st Jan. to 31st May.	Total Fall for May.	Average Rain-fall, June.	Pastures.
		Inches.	Points.	Points.	Points.	
76	Mallee North	12.57	798	212	128	G
77	Mallee South	13.73	699	235	161	G
78	North Wimmera	16.26	600	201	204	G
79	South Wimmera	19.58	695	200	244	G
80	Lower North Country	16.93	872	299	213	G
81	Upper North Country	19.64	914	306	259	G
82	Lower North-east	28.48	1,227	387	387	G
83	Upper North-east	42.50	1,423	488	658	G
84	East Gippsland	30.29	1,067	271	299	G
85	West Gippsland	35.12	1,014	353	347	G
86	East-central	33.69	1,072	309	346	G
87	West-central	24.08	897	281	264	G
88	North-central	26.11	1,013	311	329	G
89	Volcanic Plains	23.88	782	241	265	G
90	Western Coast	29.86	817	334	353	G

TASMANIA.

91	Northern	41.15	938	249	556	F
92	East Coast	32.26	850	247	94	F
93	Midland	21.63	640	137	221	F
94	South-eastern	27.98	771	126	277	F
95	Derwent	25.51	673	143	249	F
96	Central Plateau	31.17	755	138	416	F
97	West Coast	85.12	2,403	452	875	F
98	King Island	37.17	730	311	42	F
99	Flinders Island	27.69	62	255	354	F

N.B.—100 points = 1 inch.

H. A. HUNT, Commonwealth Meteorologist.

Avon Downs Station.

With further reference to the above, the sale of which to the Peel River Land and Mineral Company was briefly reported last month, the station was formed in 1882 by Mr. Thomas Guthrie, father of Senator J. F. Guthrie, managing director of the Avon Downs Pastoral Company Proprietary Limited at the time of the sale. He purchased the bulk of the property at auction in Adelaide in the year mentioned, the blocks bought being considered the pick of the Barkly Tableland, and were known as the Herbert River auction blocks. Later Mr. Guthrie added to his original holdings, and was not long in stocking his newly-formed station with Merino sheep, Shorthorn cattle, and well-bred horses, most of which were drawn from his stations in Victoria and the south-east of South Australia. Mr. Thomas Guthrie was the first man to develop and prove the Barkly Tableland for sheep, and the scoured wool from Avon Downs has topped the London market.

The agents in conjunction for the sale were Dalgety and Co. Limited, Geelong, F. A. Brodie and Co. Limited, Sydney, and Garvin and Cousins Limited, Tamworth.

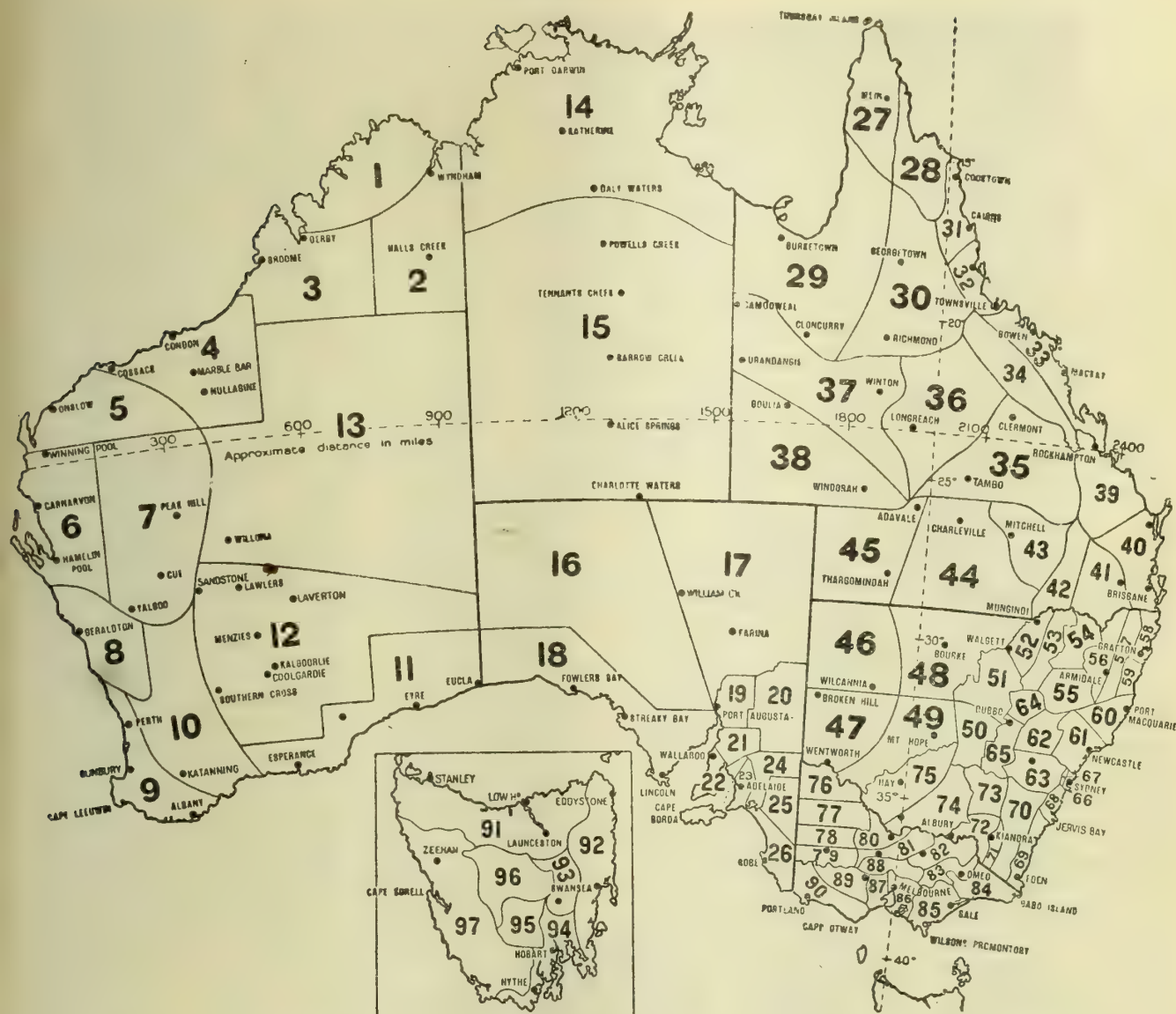
Northern Territory Needs.

A deputation of pastoralists, including Mr. Conacher, managing director of Vestey's, and Messrs. Cotton, Thonemann and Callum, last month waited upon the Minister for Home and Territories at Darwin, and urged the Federal Government's attention to a number of important requirements of the Territory. Chief among these were the north-south railway; assistance to stations making roads; more frequent mails; motor cars on railways; wireless telephones or telegraphs; an efficient and adequately staffed Stock Department, able to deal promptly with outbreaks of disease; study of certain diseases; provision of preventive serum; strict administration of brands Acts and ordinances; increased protection for the pastoral industry, by modifying existing, or introducing new, ordinances; increased provision for police in the pastoral areas, both in numbers and conditions; provision of more pounds. Mr. Cotton urged that a consolidated Northern Territory Land Act be compiled.

Mr. Poynton, replying, said that the north-south railway had had his lifelong advocacy. Everything possible would be done in regard to diseases among humans and stock, policing, and brands, and existing Acts and ordinances would be considered. Regarding the opening of the stock route overland, instructions had been given that, after Peacock's line of bores had been completed, attention would be given to any other country north, and the Minister suggested that the deputation should give him locations where bores could be put down. He agreed that ordinances should be consolidated.

Australian Rainfall Map.

N.B.—100 points = 1 inch.



Seasonal.

The position is thoroughly satisfactory right through the Commonwealth, those parts which we referred to last month as being on the dry side having had abundant rains in the last few weeks. New South Wales has had general falls, grass is everywhere, stock are fat, and prospects for the winter are as good as they could possibly be. The dry parts of Victoria have had more or less constant rain since last writing, and with mild temperatures crops and pastures are looking first rate. Stock are in good condition. In Queensland, the Darling Downs, and some of the country west and south-west thereof, were reported last month as being in need of rain, and since then they have had full and plenty; in fact, the whole State, except in parts of Carpentaria and on the Peninsula, has had a thorough soaking. Consequently the outlook is excellent. In Tasmania winter prospects have improved considerably as the result of useful

rains in the south and midlands; crops and grass are now making good growth generally, and stocks have held their condition well. South Australia is experiencing ideal conditions, feed and water are abundant everywhere, the lambing has been exceptionally good, and in the agricultural areas also everything is going well. In Western Australia practically the whole State, the exception being the far north, has had good rains during the month. These were particularly welcome on the Murchison, and have been a great relief to stockowners there; the rain extended right up to Port Hedland and Broome, unusually far north for this time of the year. All the stock routes will be opened up. In the North Island of New Zealand pastures are more or less bare in Taranaki and the greater part of the Hawkes Bay Province, but elsewhere there is fair feed. In the South Island it is still very dry in South Canterbury and South Otago. Marlborough is also dry, and feed scarce, but stock are looking well.

On the Wallaby.

Motor Trip to Central Australia.

(Continued.)

PART VI.

From Alice Springs we set out for Hermansberg Mission Station, on the upper reaches of the Finke, some 100 miles to the west. The track to same due west through the ranges everyone told us was absolutely impossible for a car, and some had doubts as to whether we could get through by taking the south-western route, which 15 miles out cut through the most southerly range at Pine Gap, and afterwards runs along the Emily Plains, on the south side of and parallel with the MacDonnells, till at about 70 miles the most northerly spurs of the James Range to the south are approached, and they come to within twelve to fifteen miles of their much loftier neighbours, the MacDonnells, on the north. However, Sergeant Stott kindly lent us Charley Cooper, an Arunta "boy" of about 45, as a guide, who, though minus one eye, had the sight of a hawk with the other, and he took us through unflatteringly. But without him we would in all likelihood have lost the track dozens of times, as time and again it died out to nothing, and mostly was only faint single camel pads here and there. The Mission Station people seldom go in to Alice Springs, their mail (one a month) and stores all coming up the Finke from Horseshoe Bend. Though fairly heavy in places, we found the 89 miles (the exact distance it proved to be from Alice Springs) much better going than almost any similar distance along the telegraph line, and the last ten miles a really good and firm surface.

We passed through picturesque Heavy Tree Gap, then through the police paddock, a little run in the valley some three or four miles wide, lying between the middle and southern ranges, where the police keep their spare horses and a small herd of cattle. This valley was the best grassed country we saw on the trip, and had a splendid mixture, mainly of Never Fail, Plume, Northern Kangaroo, Big Umbrella, and several others of the Pannicum family of grasses, but the most conspicuous was the Pappa grass of Western Queensland, often called Blowaway or Breakaway in northern New South Wales, and which Cooper said was the grass from the seeds of which the natives make flour.

Nine miles out the bed of the Temple Bar Creek was twice crossed, and after the second crossing we passed several very beautiful iron trees, weeping just like willows, but if anything more graceful and lacelike, and certainly the best specimens we had seen. Talking about trees, I forgot to mention in my last chapter a peculiar tree quite new to any of our party, but common in the vicinity of the MacDonnells, viz., the cork tree. We first sighted these trees on the Emily Plain, three or four miles south of Heavy Tree Gap, and for some time took them to be a species of honeysuckle, but on closer examination found that the bark, about an inch thick, was exactly like cork. These trees run from 20 to 30 ft. in height, and about 6 to 12 in. in diameter. The timber is very white, but the bark true cork colour, and sections cut across are very ornamental.

The pines on Pine Tree Gap were the first we had seen since Orroroo district, nearly 800 miles south; hereabouts they are on the small side, apparently the same size and species as those with very dark green foliage on the ranges near the head of the Murray, and from where, just below the snows of Kosciusko, these notes are being penned.

Before crossing the Gap we got a shot at a very big wild dog, palpably a crossbred. He had just cut our track ahead, and evidently never having seen a car before, out of curiosity pulled up about 80 yards off. Though we did not drop him, he got such a peppering that he will probably give his next car a very wide berth. Once out on the plain the first ob-

ject of interest was a small mob of red kangaroos, one a real "Old Man." Usually such would not be considered of much interest in any part of The Centre, but with the past 2½ years so dry, almost all game had disappeared, and these were the first kangaroos we had seen. We found that down on the level country they are all of the red species, but in the hills and ranges they are of the greyish brown variety known as "Uros," and from the fine collection of skins we saw at the Mission Station, the "Uros" carry much more fur, though they are not so big, as the red species.

At 35 miles the Hugh bed was crossed, some 100 miles above our last crossing, just after leaving Alice Well Police Station. The width of the bed was just about the same, but the sand not nearly so heavy, and apparently much shallower than in the lower reaches. At this crossing is a good well, known as Milner's Camp, and close to the boundary of the old Owen Springs Station, of interest as being the first station owned by Sir Sidney Kidman. He bought it as a young man, to secure a fine lot of horses running thereon, and after spending about twelve months there breaking them in, took them down south and resold the run. Probably there is no keener or more experienced judge of a good horse in these States than the "Cattle King," and he has often expressed to the writer his high opinion of the MacDonnell Range horses. Owen Springs is now merged in Messrs. Hayes Bros.' huge holding.

Twelve miles beyond Milner's Camp five brumbies crossed the track, all dark bays, half-bred draughts in type, and in spite of the dry season, all fat. They displayed none of the curiosity of our wild dog friend, and on sighting the car simply went for their lives.

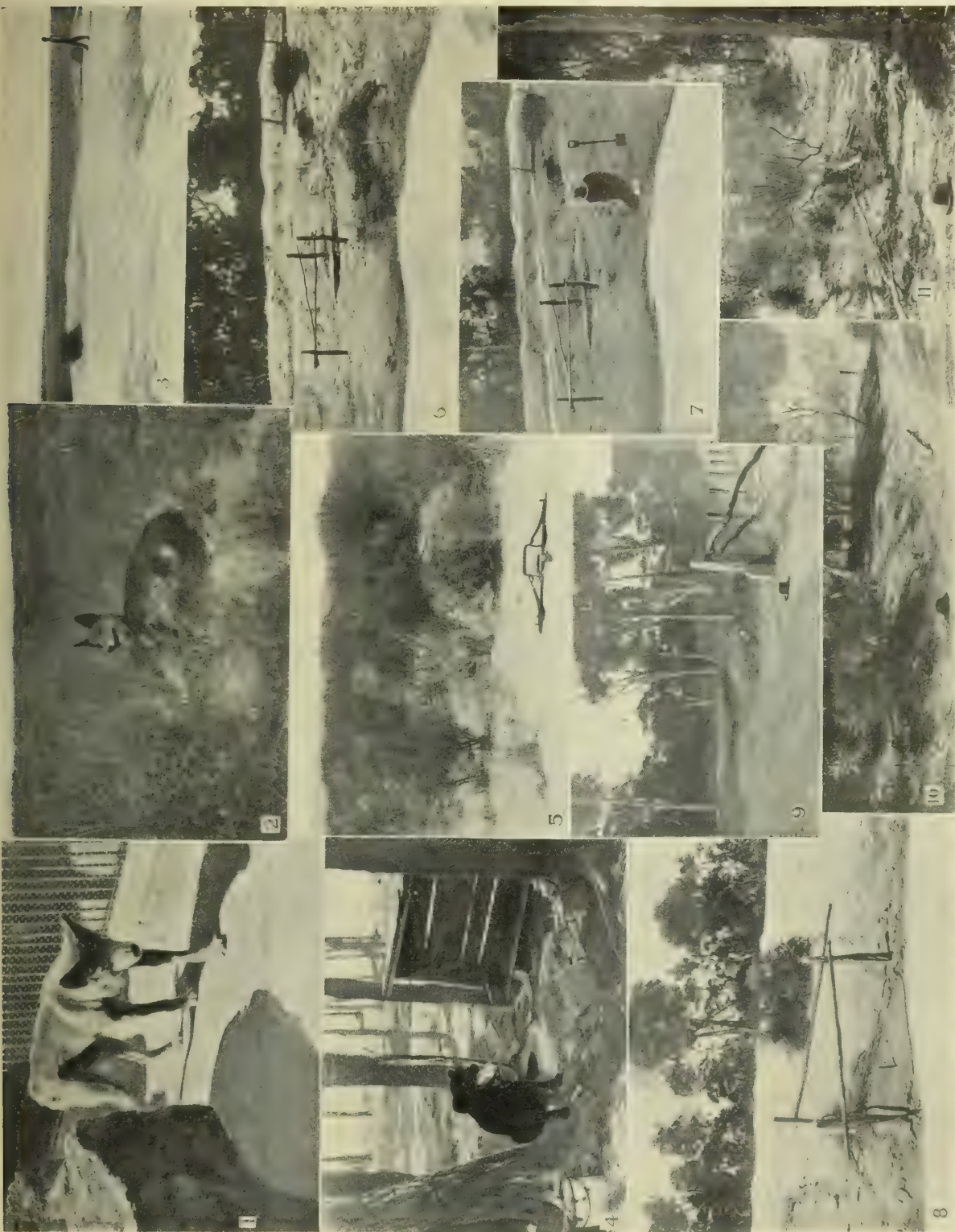
Just beyond the Poll and Diamond, or half-way well, we sighted, floating gracefully at some 300 to 400 ft. above, what was as far as we could judge at that height, a real *rara avis*, viz., a black-breasted buzzard. In nearly 50 years' wanderings in the bush of the different States, the writer can only be sure of having seen before one specimen of this rare and almost extinct bird. That was back in the spring of '83, on the back of Cowl Cowl Station, in the Lachlan district, when in company with another keen collector, Mr. J. J. Baylis, of Wagga, they had the unique experience of taking the first eggs known of the species. At the height the bird was soaring the intense black of the breast looked little different from that of really dark specimens of the common wedge-tailed eagle, and though this chap looked just as big, the different shape of the tail, and the decided band of white across the centre of each wing, left little doubt, for there is no other species of the eagle and hawk family inland anything like approaching the size of the wedge-tailed eagle, except the black-breasted buzzard.

At 57 miles the first rabbit we had seen north of Oodnadatta, in a stretch of over 400 miles, popped up, and thereafter in all the trip we only saw about half a dozen, pretty good evidence that the long, dry spell just passed through had given them a good shake up. However, before they got so scarce they must have been a great stand-by for the natives, for almost all descriptions of game, with the single exception of pigeons, and even emus, had practically quitted the central districts. We understand, however, that at the present time, owing to the wonderfully bountiful season of the past nine months, The Centre is simply teeming with game.

From 60 to 70 miles out we passed through good feed in the shape of that fine drought-resister, cotton-bush, and at 78 miles crossed Ellery's Creek, named after a former well-known Victorian Government astronomer. At a waterhole in the creek we disturbed about 100 big black cockatoos, the species with a red band across tail and wings, and they screeched their disapproval of our intrusion as loudly as their sulphur-crested white brothers of the south could do, and that is saying a lot.

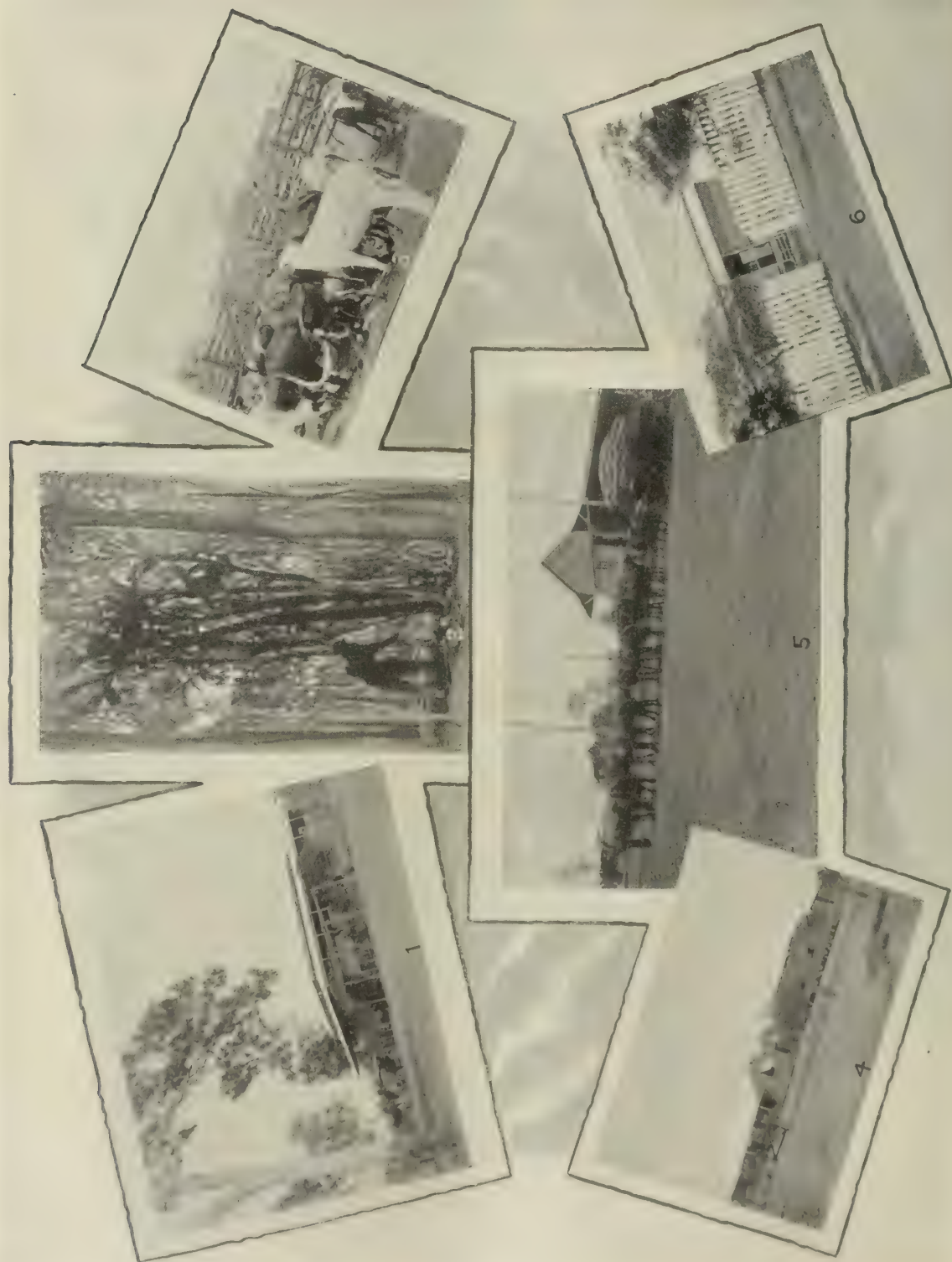
We were now on the Mission Station, or Hermansberg run, and passed a number of the station cattle, showing strong Hereford blood, but not equal in substance and bone to those we saw further east on Hayes Bros.' country, which were mostly Shorthorns, with a dash of Hereford.

(To be continued.)



1. Purebred Dingo, Zoological Gardens, Melbourne. 2. A Noted Sheep-killer; kangaroo dog-dingo cross. 3. Sand Soak, where two dingoes were trapped. 4. Kelpie, indirectly responsible for trapping 23 dingoes in 2 years. 5. Suitable Spot for Dingo Trap. 6. Trap at the Edge of a Dam; position shown by stick. 7. Settling Trap, shown in Fig. 6. 8. Trap Set Near Dam in Enclosure to Keep off Stock; position shown by stick. 9. Corner of Netting Fence; two dingoes were caught in position shown by hat. 10. The hat marks spot where three dingoes were caught on an old track a chain from netting fence, shown in Fig. 9. 11. Dry Bed of a Creek; the hat shows where a dingo stepped on to a trap. (The above photos have also appeared in "The Western Mail.")

TRAPPING THE DINGO. (See special article.)

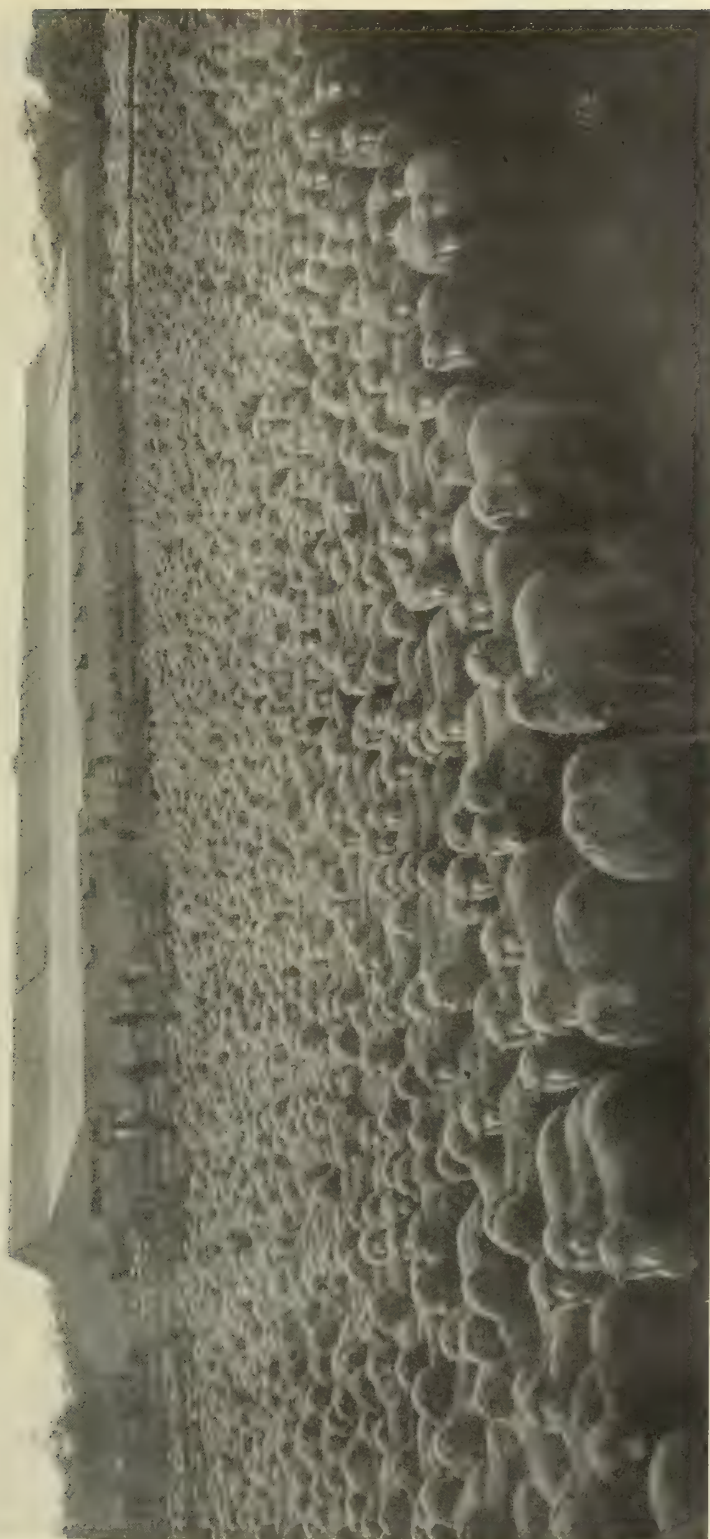


1 BALCOMBA HOMESTEAD, DUBINGA DISTRICT, the property of Messrs. Wilson and McDouall, owners also of Callings, Calliope, and Rannes Stations.
4. MEN'S QUARTERS AT LEILA VALE.

2. CUTTING DOWN PEAR TREE FOR BURNING, BALCOMBA.
6. STATION SUPPLIES LEAVING DUBINGA FOR BALCOMBA.

3. DRAFTING CATTLE ON LEILA VALE, CLONCUREY DISTRICT, the property of Mr. John Lobston.
6. LEILA VALE HOMESTEAD.

QUEENSLAND SNAPSHOTS.



A RIVERINA SHEARING SHED, WITH MOB OF ABOUT 2000 MERINO EWES.



CATTLE COUNTRY IN CUBA.



APR 1921
BOYCE TWO-YEAR-OLD FRIESLAND GRADE HEIFERS, BRED ON MR. J. WOOD'S PROPERTY, COLNE VALLEY, SALISBURY.



CALVES BY A RED POLL BULL ON COLNE VALLEY.
CATTLE IN RHODESIA.—IMPROVING THE NATIVE STOCK.



MARYVALE HOMESTEAD IN THE '60s.



BURDEKIN RIVER AT DALRYMPLE.

PIONEERING DAYS IN NORTH QUEENSLAND.

(These photos were taken some 60 years ago, and kindly lent us by Mr. E. E. D. White, of Bluff Downs.)



DEMOSTHENES (IMP.).



PYRRHUS THE FIRST, WINNER OF THE DERBY IN 1846.

BLOOD SIRES.

(See letterpress by "Fife and Drum.")



GENERAL VIEW OF THE WORKS.



ANOTHER VIEW OF THE WORKS.



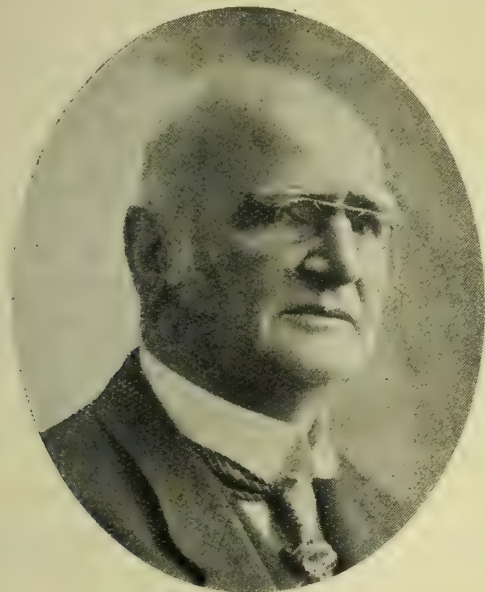
THE KILLING FLOOR.

THE NORTH-WEST MEAT WORKS LIMITED AT CARNARVON, W.A.

Obituary.

Henry Harrowell.

It is with very great regret that we record the death of Mr. Henry Harrowell in Sydney at the end of last month. His passing removes a pioneer, who in the course of a long life, by his sterling qualities, his enthusiasm, uprightness and



THE LATE MR. HENRY HARROWELL.

venient judgment, which always thought the best of all men, gained the affection and regard of all those who were given the privilege of his friendship. As a pioneer in the extension of the present great business of Messrs. William Cooper and Nephews, he came into close touch with many men engaged in the pastoral industry in Australia, New Zealand, South Africa and South America, and those who knew him in those early days and the men who were the friends of his later life will alike regret to hear of his death.

Born at Epsom, Surrey (Eng.), in 1846, he studied law, and entered his brother's office in London. On the latter's death he took up journalistic work in India and America, and later entered the service of Messrs. Cooper and Nephews, this being some fifty years ago. In his early connection with the firm he travelled all over the United Kingdom, and then went through South Africa, South America and North America. He was a great enthusiast and a wonderful worker, and the pioneering work he did for Coopers in those countries was mainly instrumental in the building up of their big business there.

In later years Mr. Harrowell took over the supervision and control of the Australian business, living here for a while and then taking charge of the New Zealand business. He then settled down in the Dominion, but at the same time supervised matters in Australia, travelling to and fro between the two countries continuously. Eventually a branch house was established in Australia, and Mr. Harrowell then devoted his time entirely to New Zealand, but he gradually dropped active work, and control was taken over in Auckland by his son, Mr. Shirley Harrowell. Another son, Roland, is managing director of William Cooper and Nephews (Australia) Limited.

The late Mr. Harrowell, in the course of his pioneering work, acquired—and retained to a remarkable degree—a very wide knowledge of men and countries. He had a wonderful memory for faces, facts and places, and his reminiscences, clear, distinct and told in a most interesting manner, always irresistibly held the attention. He placed the very greatest value on friendship, and himself was the staunchest of friends. He leaves a widow, two sons and three daughters. His youngest son, Reginald, who served in Palestine during the war, died a few months ago.

Dr. William Macansh.

A member of a well-known Queensland pastoral family died in Melbourne last month, in the person of Dr. William Macansh, of Brighton. Although a medical practitioner and a resident of Melbourne, Dr. Macansh took a very keen and active part in pastoral affairs, and controlled important interests in New South Wales, Queensland, and Western Australia.

Born in the Lower Hunter district, New South Wales, 62 years ago, he was a son of the late Mr. G. D. Macansh, and was educated at the Newcastle Grammar School and Sydney Grammar School. After matriculation at the Sydney University he went to Edinburgh University, where he gained degrees of Bachelor of Medicine and Master of Surgery. He then returned to Australia, and for some time travelled with stock and lived on stations in Queensland, eventually taking up the practice of his profession in Melbourne in 1887.

Dr. Macansh did not, however, lose touch with the industry in which his family had taken such an important part in Queensland, and at the time of his death he was acting as managing director of the extensive interests of the Macansh Estates Limited in Anna Plains Station, north-west Western Australia, Albilbah, Central Queensland, and Toolebuc,



THE LATE DR. WM. MACANSH.

Western Queensland. He took great pleasure in good stock, and was also a director of the Deepwater Estate's properties, Deepwater (Tenterfield district, N.S.W.) and Myall Downs (Warraldia district, N.S.W.). He was a man of broad outlook and wide experience, kindly, sympathetic, and lovable, and as one close personal friend of 30 years' standing said, to know him was a privilege.

Notes of Interest.

RIVERINA'S RAILWAY NEEDS.

Riverina will never have the railway service to which she is entitled, or through rail connection with her natural ports, until she becomes a separate State or is attached to Victoria. The former is preferable, and with it will come the expansion and progress denied to her by the throttling system of centralisation that glorifies Sydney at the expense of the rest of the State.

LABOUR ON QUEENSLAND LABOUR.

"The waggons and carriages of the railways of Queensland to-day were a scandal and a disgrace to the Government of Queensland, and as for the engines—well, they had had the guts run out of them. There was no justification for the sacking of one railway revenue worker in Queensland. The position was a scandal and a disgrace." This is not from some crusty Tory, as the Labour man is so fond of classing his opponent, but is an extract from a speech by Mr. D. Weir, Labour member for Maryborough, Q., at a gathering of unions to consider the unemployment question.

THE GOSPEL OF ANARCHY.

It cannot be emphasised too much, or too often, that Australia is essentially a producing country, depending chiefly, because of its small population, upon the world's markets for the sale of its surplus products. It is not only the capacity to win wealth from field, factory, or mine that will govern industrial expansion, but the cost price of the article which must meet world-wide competition. It is obvious, therefore, that there is a close community of interest between capital and labour which must be harmonised before wealth can be created. The gospel of sectional distrust and hatred is the gospel of anarchy, which not only helps to disturb society, but, if unchecked, must ultimately destroy it. Ancient civilisations declined and fell when class fought class, when the people neglected the fields and glorified the city, when Governments penalised the producer, destroyed initiative and enterprise, and pledged the public credit for sectional interests.—Hon. David J. Gordon, M.L.C., in his presidential address to the Adelaide Chamber of Commerce, 29th April, 1921.

BANKS AND FINANCE.

Sir Charles Mackellar, in his address at the recent half-yearly meeting of the Bank of New South Wales, said that "the bank's customers now realised that while it was prepared to meet the legitimate requirements of trade and business, it was not prepared to go to unreasonable and imprudent lengths in support of their enterprises. . . . Without pressing unduly on clients, the bank was steadily but quietly working to get reasonable reductions in what it considered redundant figures." No one needs to be told that these are hard times, and that money, largely owing to the unprecedented slump in the sale of our principal commodity, viz., wool, is very scarce in the country, but this is one of the main reasons why the banks are compelled to exercise a certain amount of stringency. At the same time, primary producers can rest assured that their interests are regarded as of paramount importance by the banks and by financial houses, and that they will accommodate them to the limit of their ability.

THE NEW STATE MOVEMENT.

A good suggestion is made by a correspondent in regard to the above question, which was dealt with in a letter last month by Mr. W. E. Abbott, of Wingen. The latter, in the map accompanying his letter, divided New South Wales into four States—Wentworth, west of the Lachlan and north from Condobolin; New England, the north-east portion; Riverina, and the remainder, comprising the rest of the State from the coast to the proposed division of Wentworth. This would certainly place one of the most fertile and valuable rural areas in New South Wales under the dominion of the huge industrial vote of Sydney and Newcastle, which

would ruin its chances of development and prosperity, even as more remote parts have been neglected or made subsidiary to city interests under the present system. The best way out of the difficulty, as suggested by our correspondent, is to make a fifth State out of the County of Cumberland, as Buenos Aires, the capital city of Argentina, was made a separate State by the Government of that country. This should effectively permit the development of the State of New South Wales as outlined by Mr. Abbott.

RELIEF FOR NECESSITOUS GRAZERS.

At the annual general meeting of the Graziers' Association of New South Wales last month it was resolved to urge upon the Government that, owing to the desperate financial position of many of the smaller graziers, it is imperative that assistance be given to them. This was coupled with a recommendation that the balance of the loan money raised for the assistance of necessitous farmers be made available through the Rural Industries Board. These men are "right up against it." They were cleaned out by the drought which ended last year, they have had very little income since owing to the collapse of the markets, and the money that they borrowed with which to carry on and restock is now falling due. They do not ask to be spoon-fed, but if some form of relief or accommodation is not forthcoming they will go out altogether, which will mean that the country in general will suffer as well as the individual, seeing that sheep stocks in New South Wales are already at a very low ebb. The gist of the Minister's reply to the deputation that put this resolution before him was that he did not know where the money was to come from if the banks could not furnish it. The balance of the loan money raised for farmers only amounted to about £150,000. Fuller particulars will be found in our New South Wales correspondent's letter.

AMALGAMATION OF PRODUCING INTERESTS.

We are glad to note that at the recent annual conference of the Graziers' Association of New South Wales the desirability of bringing about a definite amalgamation of all associations representing primary producers in the State was recognised, and that it was decided to extend a "very cordial invitation to Farmers' and Settlers' Association, Primary Producers' Union, Stockowners' Association, Sheep-breeders' Association, Pastoralists' Union of Southern Riverina, and Pastoralists' Association of West Darling, to appoint representatives to meet representatives of this association for the purpose of discussing the advisability and practicability of bringing about an amalgamation of these organisations, and the terms upon which such an amalgamation could be effected." Also "that realising the disadvantage of having three associations of graziers, with differing policies in the one State, this conference supports an amalgamation of West Darling and Southern Riverina Associations with the New South Wales Association, thus securing uniformity of policy, and that the secretary write to the presidents of the West Darling and Riverina Associations, requesting them to take a vote of their members on this proposal."

Unity and a common policy under a central guidance were never more necessary than to-day, and the proposal outlined above might well be followed in the other States, and the amalgamated bodies in each co-ordinated in one representative executive or committee, which would meet from time to time to discuss matters of Federal concern.

Australia's Largest Station.

A subscriber in the Northern Territory writes us as follows:—"In the March issue, under the heading of 'Australia's largest station,' you give the area of Victoria River Downs as 11,561 miles. I think Alexandria Station in this district (Camooweal) is larger than this by a few miles, viz., 11,572. All the blocks are connected and under one manager, Richard Holt, and owned by the North Australian Pastoral Co. There are two outstations, Soudan and Gallipoli. I may be making a mistake in including one of the Gallipoli blocks of 530 miles, which would, of course, make all the difference."

News Gottings.

The first official live stock census for India gives the number of cattle in April 1920 as 146,000,000 head.

Mr. James E. Poole, a prominent writer on live stock matters in the United States, estimates that **one million less cattle** will be slaughtered in U.S.A. in 1921 than last year. Decrease in consumption is the principal cause apparently.

Retributive justice was meted out to a **cattle thief** at the Jomcurry Police Court last month, when a man was fined £50 and £33 ls. costs for illegally branding two cows and two calves. The defendant was given the option of six months' imprisonment.

During the tariff debate in the House of Representatives, Mr. Massy Greene, Minister for Customs, mentioned that he had information which led him to believe that some of the large wool manufacturing firms of Great Britain intend to establish extensive works in Australia.

The leading cattle breeding interests in South Africa and Rhodesia are reported to have formed a farmers' exchange, with the object of **supplying meat direct to consumers**. It is anticipated by this means to considerably reduce the price of meat, while keeping stock at a reasonable level.

The members of the Commonwealth Committee of Public Works, who are to make a tour of inspection of the route of the proposed **North-south Railway**, left Adelaide for the north on 7th June. The party includes Senators Foll and Newland, Mr. Jackson, M.H.R., and Mr. G. Whiteford, secretary.

Wonderful lambings are being obtained in many parts of England. "The Agricultural Gazette" quoted the case of one farm in Lincolnshire where just over 100 ewes have lambed, and there are between 70 and 80 pairs, and three triplets. The number of pairs in most places is above the average.

The Federal Government is about to invite tenders for the conduct of an **aerial mail service** between Geraldton and Perth, on the north-west coast of Western Australia. The distance between the towns is 1195 miles, and no tender of over £25,000 will be considered. It is proposed to fly one trip each way per week.

A company, with a capital of £300,000, and called the **Woolgrowers' Manufacturing Company**, has been formed for the manufacture of **woollen goods in South Africa** on a considerable scale. The proposed plant will be able to handle 6,000,000 lbs. of unwashed wool per annum. The factory is to be located near Capetown.

A preliminary live stock return for Queensland gives the number of sheep in the State on 1st January, 1921, as 8,596,803, cattle 6,610,125, and horses 741,487. Compared with the total for the previous year, sheep show a decrease of 782,529, cattle an increase of 669,692, and horses 9782. The figures are subject to amendment.

The United States Railway Labour Board on 1st June ordered an average **wage reduction of 12 per cent.** to employees in the railways. The order takes effect as from 1st July, and is expected to cut the pay bill down about £80,000,000 per annum. We have yet to hear what the unions have to say. They meet the end of the month to consider the order.

According to Dr. Reakes, Director-General of the Department of Agriculture in New Zealand, there has been **no case of anthrax in the Dominion** for over 15 years. All classes of animals are singularly free from parasitic diseases. He attributes this happy state of affairs largely to the work of Dr. Gilruth, who when chief veterinary officer, introduced the necessary preventive measures.

A press cable states that 70,000 flame throwers captured from the Germans during the war were last month being used in France to **destroy locusts** blown from Algiers. Further,

that thousands of bushels of locusts had been killed. The use of flame throwers for the purpose is not new, having been proved effective before. One may be inclined to doubt the 70,000 though.

Approximately £114,000,000 has been allocated for **road and bridge construction** and maintenance in the United States during the current year, under a plan of Federal and State co-operation. Further, there is a possibility of the amount being increased by an additional Federal appropriation. With such huge sums available it is no wonder that roads are good in the States.

Pit ensilage made 26 years ago at Camden, N.S.W., was recently opened up and found to be in first class order. The silage was put down in 1895, covered with flood water in 1898, and the pit first opened in 1902, when the bulk of the contents were used during the drought of that year. What was left was earthed over again and the pit not touched until this year. Those who examined the sample say it is of excellent quality.

Regulations prescribed under the Quarantine Act provided that **importers of wool into the Commonwealth**, other than samples, shall, prior to shipment, notify particulars to the chief quarantine officer, and obtain his permission to proceed with the importation. On arrival in Australia the wool will be removed to a quarantine station or place approved by the quarantine officer, for disinfection. Wool will not be subject to this restriction if accompanied by a certificate that it was grown in either New Zealand or Norfolk Island. There is not likely to be much ground for giving effect to the regulations!

The **Island of Madagascar**, a French possession off the east coast of Africa, comprising 226,000 square miles, carries cattle stocks numbering about 7,000,000 head. The country is very suitable for cattle, and there is little disease, with the exception of tuberculosis and anthrax. The carrying capacity is high, ranging from a beast to five acres, but the cattle are all of the native type, and with the exception of a very few Europeans, all in the hands of the natives. No attempt has yet been made to grade up these cattle—which take about six years to mature, and are small, though good beef—owing to the difficulty of making importations. Pure-bred stock from Africa, the nearest source, are prohibited, owing to disease, and as there is no direct steamer service from Australia, to import animals from here would mean specially chartering a vessel for the purpose. It is unfortunate, as the first cross of one of the beef breeds on the native cows would undoubtedly show a great improvement, and bring about earlier maturity. Ticks are fairly common, but as far as is known, they do not convey any constitutional disease. Mr. W. Sutherland, of Ambohijanahary, who recently called on us, has just constructed the first dip on the island. There are a number of small canning establishments, but Vestey Bros. have a very up-to-date freezing works at Majunga, on the north-west coast, where they can treat 600 head of cattle a day. Deep-sea vessels can come right alongside their wharf.

Cost of Wool Production in America.

In view of the inquiry to be made by the Graziers' Associations of the different States into the cost of producing wool in Australia, these figures, relating to North America, may be interesting.

The United States Tariff Commission reports that the cost per head of running sheep in the range States during 1918, 1919 and 1920 was £1 7s. 8d., £1 8s. 6d. and £1 8s. 3½d. respectively, excluding interest. Including interest at 6 per cent. on the total investment, the figures were £1 13s. 1d., £1 15s. 7d. and £1 15s. 0½d. These later figures compare with 10s. 1½d. per head in 1910. Costs are apportioned between mutton and wool on the basis of the ratio of wool receipts and mutton receipts. The cost per lb. allotted to wool in 1918 was 1s. 6½d. and in 1919 1s. 6d., excluding interest.

Personal.

Mr. William Curtin, of Rock Retreat, Amaroo, N.S.W., died early this month, aged 78 years.

Mr. George Francis Armitage, of Hoo Lodge, and late of Victoria, died in England on 22nd March.

Mr. Duncan Graham, a well-known stockowner of the Cardwell district, died recently at Innisfail, Q.

Mr. T. Wild, sen., died at his residence, Gradgery, on the Marthaguy, N.S.W., last month, aged 82 years.

Mr. A. E. Hunt, M.L.C., has been elected president of the Graziers' Association of New South Wales for the ensuing year.

Mr. G. L. Sutton, Commissioner for the Wheat Belt in Western Australia, has been appointed Director of Agriculture in that State.

Mr. Simon Staughton, of Eynesbury, Melton, Victoria, son of the late Captain Tom Staughton, D.S.O., has just returned from England.

The Order of Knight Commander of St. Michael and St. George has been conferred upon **Mr. E. Mitchelson**, of Motutara, Auckland, N.Z.

Mr. F. E. Riddiford, a well-known and highly respected sheep-farmer of Bideford, Wairarapa, N.Z., has died after a brief illness at the age of 33.

Mr. H. D. Holmes has retired from the position of general manager of the Western Australian Bank, and has been succeeded by **Mr. R. L. Herbert**.

Mr. Charles E. Law, The Grange, Brackla, Nairn, Scotland, has been appointed judge of the Shorthorn classes at the Palermo (Argentina) Show in September.

Mr. J. M. Niall, who is at present on a visit to England, was presented to their Majesties the King and Queen by H.R.H. the Prince of Wales while at the Derby at Epsom.

The late **Clive Stanley Wragge**, of Gum Creek, Willbriggie, N.S.W., who died in May last year, bequeathed the sum of £5000 to the Geelong Church of England Grammar School.

Mr. T. B. Turner, of the Peterborough Society, has been appointed secretary of the Royal Agricultural Society of England in place of **Mr. T. McRow**, who has resigned after forty-three years' service.

Mr. A. W. Pearse, managing director of The Pastoral Review Prop. Limited, who, with his daughter, has been for a health trip to Java and the Malay States, returns to Sydney this month by the s.s. "Mataram."

Mr. Edmund H. Vestey, of the firm of Vestey Bros., and a director of the Union Cold Storage Company Limited, has been created a Knight Commander of the Bath "for great assistance in feeding troops during the war."

Mr. George Jeffrey, chairman of the South Australian Wool Committee, is so far recovered from his serious accident early in the year as to be able to attend a recent meeting of the council of the Adelaide School of Mines.

Colonel Walter Oswald Watt, late of the Australian Flying Corps, a partner in the firm of Messrs. Gilchrist, Watt and Co. and director of Gilchrist, Watt and Sanderson Limited, Sydney, was accidentally drowned near Sydney, on 21st May.

Dr. C. J. Reakes, the Director-general of the Department of Agriculture in New Zealand, recently arrived in Melbourne on a visit, partly for health reasons and partly to gain information of value to the working of his department in the Dominion.

Mr. H. W. Potts, for many years principal of the Hawkesbury Agricultural College, New South Wales, sailed for America last month. Prior to his departure a few friends, including Sir Joseph Carruthers and Sir Denison Miller, tendered him a dinner at the Hotel Australia, Sydney.

The death is reported from Torquay, England, of **Mr. G. J. Dennistoun**, formerly of Peel Forest, Canterbury, N.Z. He was at one time part owner of the Haldon run, in the Mackenzie Country, and afterwards acquired the Peel Forest run, where he resided until he left for England a few years ago.

The death is announced of **Mr. J. Bright**, manager of the New Zealand Loan and Mercantile Agency Company's branch at Gisborne, N.Z. As a business man he was held in the highest esteem, and besides being chairman of the local Wool Brokers' and Stock Agents' Associations, he took an active part in public matters.

The death is announced from Adelaide of **Mr. Charles B. Warnes**, a member of a well-known family of pastoralists in South Australia. Mr. Warnes was the son of the late Mr. Thomas Warnes, of Koombulloo Station, near the Burra, and at the time of his death

he owned Woolgangi and Parcoola. He was a member of the Murkady Vermin Board.

The death occurred at Brisbane on 3rd June of **Mr. George Phillips, C.E.**, a notable railway engineer and explorer, at 77 years of age. He was associated with Mr. William Landsborough in an exploration to the west of Bowen Downs, and afterwards accompanied him to the Gulf country, where as surveyor he penetrated into parts of the Gulf never previously visited by a white man.

Mr. W. Sutherland, of Ambobijannahary, Madagascar, is on a visit to Australia. Mr. Sutherland, who went to Madagascar some ten years ago from South Australia, owns a cattle property of about 25,000 acres in the north central part of the island, west of the port of Tamatave. Its carrying capacity is about 5000 head, and the owner has just constructed the first cattle dip in the island.

Senator J. F. Guthrie, of Geelong, has been so impressed with Owen Wister's book, "A Straight Deal or the Ancient Grudge," that he has ordered 2000 copies for distribution amongst the schools of Victoria. The object of the book is to dispel the prejudices and misunderstandings that have grown up between Americans and Britons, and to appeal for greater friendship between the two nations. Incidentally, it lays considerable stress on the outpouring of blood and treasure by the British Empire in the cause of civilisation during the last century.

Sir Sidney Kidman, on whom His Majesty the King has conferred the honour of Knight Bachelor, has given his country home, Eringa, at Kapunda, S.A., to the State for use as a district high school. Sir Sidney was born near Adelaide on 9th May, 1857, and started to battle for himself when only thirteen years of age. By shrewd buying and selling of stock, and taking up mail contracts, he acquired capital and bought stations. Ultimately he became one of the largest land and cattle owners in the Commonwealth, and has a world-wide reputation as the "Australian Cattle King."

During the month the following new subscribers to "The Pastoral Review" have been received from countries other than Australasia:—Messrs. John Trollip, Riet Poort, South Africa; H. G. A. Giles, Plymouth, England; Ministry of Agriculture, Cairo; Hauzier-Gerard Pills, Belgium; H. B. Douglas, Newabbey, Scotland; Gee, Fitter and Webb Limited, London; E. Stevens, Pershore, England; Williamson and Co., Valparaiso; National Farmers' Union, London; H. Foehr, Bedford, South Africa; J. J. H. Murray, Quaggasfontein.

Mr. Frank Pearson, who has been manager of the Angas family's stud stock and highly-improved Collingrove Estate, S.A., for the past ten years, is now open for engagement in a similar capacity, and would be glad to hear of any Queensland or New South Wales station management of stud stock. Mr. Pearson has splendid credentials, and has had twenty-four years of careful study of wool, sheep and wool classing, treatment of fly trouble, veterinary work, irrigation, and general management. The Angas stud sheep, Hackney ponies, and Shorthorn cattle are widely known. Mr. Pearson was also for six years overseer on the late Sir Samuel McCaughey's Barenja and Rockwood Stations, in Queensland, and also manager of Mr. Frank Austin's Avalon Estate at Lara, Victoria. Should anyone require his services please apply to "The Pastoral Review," Wool Exchange, King-street, Melbourne.

Visitors to Melbourne Office.—From Victoria: Messrs. L. J. Weatherly, Woolloongoon; G. Tomlinson, Willowmavin; Robert Jamieson, Stony Point; A. S. Austin, Elyer; J. A. Beattie, Gisborne; E. Jackson, N. C. Clapperton, H. Tanner (Consul for Finland), A. F. Hooper, H. Peck, A. Coombe, H. J. Manson, W. Dunkerley, W. C. Carrodus, F. P. R. Goldie, Dr. Lang, Dr. Hornabrook—all Melbourne. From New South Wales: Mr. A. H. Buckland, Gumble. From Queensland: Mr. A. D. Walsb, Brisbane. From South Australia: Mr. F. Pearson, Collingrove; Hon. D. J. Gordon, Adelaide. From England: Lieut.-Colonel S. R. Timson, V.D., Berkhamsted. From Madagascar: Messrs. W. Sutherland and James Purcell.

Visitors to Sydney Office.—From New South Wales: D. Macfarlane, Eureka; C. E. Prell, Gundowringa; Chas. Binnie, 4D; J. Mitchell, Tallarook; J. MacVean, Beaulieu; A. G. M. Bennett, Rosewood; T. K. Abbott, Murrumbidgee; S. W. Tindale, Crambo; T. A. Stirton, Ben Lomond; Dr. N. W. Kater, Ennaweenah; J. Mackay, Gunywarildid; E. Killen, Nimajee; Hon. T. Waddell, Fort Bourke; J. T. Gavel, Gulgo; C. A. W. Holt, Deenderrah; G. B. Waller, Wallarobba. From Sydney: A. Rayment, H. Body, A. G. Sewell, Professor J. D. Stewart, W. W. Froggatt, J. Kidd, K. de L. Cudmore, S. McCall McCowan, Hon. A. E. Hunt, T. Sasak, Mrs. H. Harrowell, R. H. Harrowell, G. Maddison, Major C. M. Spier, Capt. R. J. Bennett, G. Taylor. From Queensland: W. C. Mathison, Dungal; D. Williams, Longreach; F. B. Starky, Rainworth; M. Mackenzie, Tooloombah. From Victoria: G. H. Knibbs, C.M.G., Melbourne; L. Leake, Cudgawa. From New Zealand: Shirley Harrowell, Auckland. From Great Britain: W. M. Meredith, London.

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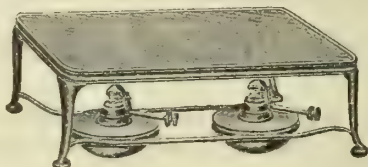
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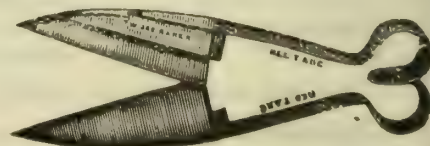
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During the last decade we have had more than enough in the way of practical demonstration of the power of unity and organisation. We saw its strength and what it achieved in the war, and how it was only crushed ultimately by counter organisation. Coming nearer home, we have seen time and time again what organised Labour has done, and as long as it used its power for reasonable betterment, we had no real cause to kick. With the passing of that phase, however, industrial organisation, gaining in strength and stature, began to abuse its power, and the employer, not the least among whom has been the primary producer, unorganised and lacking cohesion and common policy, has had no course left to him but to submit to the dictates of Labour, which has laughed at arbitration awards and agreements, secure in the knowledge that with its compact ranks it could always afford a fight with its undisciplined and unorganised antagonists. It was therein that Germany's strength lay until the armies of all the Allies were placed under one supreme command.

The Australian Workers' Union is the best possible example of the value of the policy of "get together," and it is a wonderful thing that we have not in all these years learnt the lesson it has taught. Every branch of rural industry has been bullied and brow-beaten, and any attempt to put up a fight has usually ended in a fiasco because of that lack of unity which is the secret of success. We believe that the only solution to the industrial problem on the land, and the only hope of future security lies in the formation of "one big union," comprising all primary producers, for the purpose of doing all their own work—should the occasion arise. This would place in their hands the strongest weapon that they can possibly forge against A.W.U. domination,

the weapon of independence. We have urged this before, and to conservative minds it may appear too big a scheme, but it is feasible and practical. Naturally there are many details to be arranged in the constitution of such a union, and it cannot be done for nothing. The producer must be prepared to put up a big fund. Surely it will prove far cheaper to do this than to go on submitting to whatever terms the A.W.U. cares to dictate, simply because we have no organisation and no exchequer. And yet anyone who has had any experience of trying to raise a fund of this sort in any branch of commercial enterprise knows that it is about as easy to get butter out of a dog's mouth. Donations are comparatively easily obtained for any other object. Apparently the employer is ready to help everybody but himself. It is unselfish, but it is not business.

Of course, a general producers' union would take some time to organise into the efficient machine that it would need to be, and quite probably it would not be necessary even to start the machinery. Once let the A.W.U. see that it is at last efficient and they will treat it with the respect that no one can wonder they have not shown before. Let the woolgrower get into line with the other branches of primary producers, the wheatgrower, the dairyman, the fruitgrower, &c.; let them co-ordinate, and then instead of having hundreds of the latter reluctantly forced into joining the A.W.U., they will become members of an organisation that will show that body the producer has at last "got together." The sooner will there be on the land industrial peace, and a better understanding, born of wholesome mutual respect.

Soldier Settlement on the Land and Legislation.

If the remarks made by the Premier of New South Wales before leaving England, as cabled, are correctly reported, we may expect that on his return when the House meets the Large Holdings Bill will be again brought up for consideration. Mr. Loughlin, Minister for Lands, has stated that amendments would be made in the bill when it is reintroduced, but he did not definitely say what these amendments would be. It is said that they will be in the direction of permitting resumptions at current market values, and payment in cash instead of by debentures—which would certainly make the bill more acceptable to the present landowners and their mortgagees. But from the point of view of the general public, and the taxpayer in particular, we cannot see that these amendments are going to improve the bill or the financial position to any great extent.

We have recently commented upon a very comprehensive and well thought-out scheme for carrying out our obligations to the returned soldiers as a community, and for settling a strong yeoman farmer population on the land. This has been published by Mr. Digby N. Johns, of Wollongough Station, near Wyalong (who was for some years District Commissioner for Lands for the Western Transvaal, and largely responsible for the provisions of the Transvaal Settlers Law of 1902, introduced by Lord Milner), in the form of an open letter to the Premier (the Hon. John Storey) on the failure of the Closer Settlement Acts to bring about the desired results and the numerous weak points in the Large Holdings Bill.

Mr. Johns points out the fact that under the present Acts only 250 settlers are placed on the land each year—their financial position is most precarious to say the least of it—about £300,000 has been postponed to the end of their term, whilst another £350,000 is deferred—that is, in arrears—and we are marching towards wholesale organised default. He draws attention to the serious effect the Large Holdings Bill must have on the value of all securities if it becomes law, which will apply to the farmers equally with the large owners, and the tremendously heavy financial responsibilities which it will impose upon the taxpayers. He then outlines the Transvaal scheme, and gives figures to show how greatly

in advance of the Closer Settlement Acts it is, and works out a plan on very much the same lines for bringing about settlement through the agency of the landowners. It seems to us that the great advantage of this scheme for the settlers is that it will give them real farms on which they can start straight away to make an income, and it will give them the benefit of any small capital they or their friends like to put into the venture, and will secure them the co-operation instead of the opposition of the landowners. It will induce the landowners to subdivide their holdings into suitable farms, and find buyers for those farms, in many cases relieving them of heavy financial responsibilities, and giving them security for the area of the holding and the homestead left to them. It will be very much cheaper for the general taxpayer, as it will not cost anything like the amount involved under the Large Holdings Bill.

The political outlook at the present time is very hazy, and owing to vacancies which have not yet been filled, and to the possibility of adverse developments when the House meets, or even before, it may be that the Large Holdings Bill will never again be heard of, but it would appear quite evident that something will have to be done in reference to the Closer Settlement Acts, as they have proved quite inadequate for the work expected, and for which they were passed. When the practical effect of the Land Act of 1884 is considered to-day—and some of its worst features will be repealed under the Large Holdings Bill—our efforts at land settlement have been undoubtedly crude, and the system of "Resumed Areas" simply means areas for the free and untrammelled occupation of animal and vegetable vermin of all kinds. Again "balloting" for land by intending settlers is also undoubtedly crude, for it is most important that the men who are allowed to settle should be desirable men, who may reasonably be expected to make a success of a very difficult job, but under the balloting system the young man of experience who has been brought up to the life may quite likely be unsuccessful in getting a block, while an inexperienced man who has been in positions in the city all his life may be successful.

Putting men, whether experienced or inexperienced, on to new land which is not improved and possibly rabbit infested, and expecting them to make a living without adequate capital is also crude, not to say cruel.

All these aspects are dealt with in a very practical manner by Mr. Johns, and we would sincerely commend his pamphlet to the careful consideration of the Cabinet and the Lands Department. For it goes almost without saying that the prosperity and well-being of the whole community depends ultimately on "the man on the land." The resources of this country are so great that it will stand a lot of immature and extravagant legislation, but if the basis of land settlement is wrong, and the settlers are thereby forced into a position of ultimate bankruptcy, it will not be very long before the whole community and the Government will find themselves in the same undesirable condition. Land settlement, and especially settling soldiers on the land, is a national question, and it is essential that it should be dealt with in a broad, statesmanlike manner, and not in a spirit of party or class prejudice or politics.

The Relative Position and Prospects for Merino and Crossbred Wool.

BY "TALGAL."

Any review on this subject must be thought out on the basis of the financial aspect of the matter, together with the nature of the country to be used. All other things being equal, it is the present and future state of the market that determines which is the more profitable, wool or mutton. Wool must always be a necessary of life, but mutton has many substitutes, such as pork, fish, beef, fowl, &c. On the other hand mutton is the cheapest and most easily produced food of them all.

It is in settled communities, such as agricultural and farming districts, that the mutton sheep of the crossbred type are to be found. Where the demand for meat is nearby and the holdings are small, the breeding of mutton sheep, mostly of the crossbred or pure English breeds, is more profitable than Merinos. One reason is that in most farming districts the land is rich and near the coast, where the Merino does not do as well as the English sheep or these crossed with the Merino. Another reason is that the crossbred lamb matures quicker and gives a bigger weight of carcase than the Merino. Another factor that has added to the demand and boom in cross breeding of late years was the high prices obtained for this class of wool during the war. The value of the wool added value to the carcase, and so with crossbred wool fetching 18½d. a lb. from ewes cutting a 6-lb. average, and the lambs selling in Sydney at 30s. nine months old, it followed that given reasonable access to market and good fattening country, the crossbred was a better proposition than the Merino.

There are, and always will be, certain districts in which the Merino cannot compete successfully with the crossbred or English sheep, owing to climatic conditions. Merinos have never been able to compete in England with the native breeds, although introduced there and fostered with great care. Strictly speaking, the two classes of sheep belong to different spheres. Breed the mutton sheep near the cities and in the moist, rich lands, with the object of producing quickly matured lambs for the butcher, and keep the Merinos where they belong, out in the central and western districts, where the dry, hot climate suits them, and produces that high class wool which all the world wants.

There is no doubt that at the present time the owner of crossbred wool is on a bad wicket. The same thing happened after the Russo-Japanese war. Mankind wants to wear clothes made from the best finished and softest material he can buy, and these can be only produced from Merino wool. There is one aspect of this question which is often lost sight of. When the crossbred boom during the war was on there was, to put it plainly, a mongrelising of thousands of Merino ewes going on. Every available ewe that could be purchased was put to a Longwool ram of some kind or other, and the resulting progeny was sold and passed through dealers' hands, and crossed and re-crossed until no one could tell what the animal was. Things got so bad that the stock and station agents had a meeting at Dubbo (New South Wales) and protested against this mongrelising. It was a boom that has burst, and it is this scribe's hope that it will further burst, so that due attention will again be given to the Merino and have it put back on the pedestal where it belongs as Australia's greatest asset.

Of course as a farmer's proposition or on damp, rich country, the crossbred sheep is the right animal to keep. If the various breeds were confined to the districts to which they are naturally suited, there would be no over production of coarse wool. Some people are endeavouring to solve the difficulty by producing a dual purpose sheep, such as the Corriedale. These are alright on crossbred country, but they will not oust the Merino from the interior. The writer has seen and handled the wool from them, and also crossbreds in the West, and although the carcase is alright, from a wool point of view they do not approach the Merino. With a great many men this cross breeding is just a short cut by which they think they can get the weight of carcase and length of wool on to the Merino without the trouble of waiting some years by breeding for it.

As far as the writer can see the Merino man is going to have the best of the deal for a while, taken on the whole. Some day all these accumulated stocks of wool will be disposed of and prices will rise again. But the man behind the plough is no longer content to wear homespun and hoddie grey, he wants a better material, which is made from Merino wool. There will always be plenty of money for the crossbred man in breeding for the butcher round the large centres of production, but Australia is naturally and pre-eminently

a Merino country, and always will be. We have built up the finest system of sheep husbandry the world has ever seen, all nations want our Merino wool, and all attempts to supplant it in its own domain by the coarser woolled breeds are likely to end in failure.

If all crossbreeders would, like the few, adopt some proper system of mating and culling, a much better sheep would result. It is a relatively simple matter when the first cross are all sold yearly, but when the first cross females are kept and mated up again with purebred sires of either side, some system of breeding needs to be understood and followed, or else the flocks become just a jumble of types. The sires must be carefully chosen and the ewes culled just the same as purebred sheep. The most favoured cross is the Lincoln, Leicester, or Border Leicester put to Merino ewes. Class the progeny into three lots, culls and two lots for breeders, one having thrown to the Longwool side, and one to the Merino. Pick Merino rams for the former and Longwool rams for the latter, and by this method the resulting progeny are more even in type, provided this rule is followed every year. In time the flock is all comeback and of a good quality and even, and at the present low state of the market would sell well. A clip of this description sold recently in Brisbane at 14½d.

A very good type of wool, being a first comeback to the Merino side, is secured by crossing the Merino ram on to the half-bred Longwool-Merino ewes. The wool is bright, long, and of high yield, and should suit the present American market. When equal success can be had by keeping either crossbreds or pure sheep, then the purebred animal should be kept. Of late years it has become a practice to make one cross on the Merino with the Longwool to give added size and length of wool, and then breed the progeny back to the original type. This experiment generally ends in failure. For years afterwards types of the Longwool sire crop up. Make any desired improvements by selection with pure sheep; it is the only sure way.

In crossing, as in breeding pure, the sheep must be bred to suit the country. A Lincoln will be best for one locality, a Downs breed for another, but avoid breeding from widely distinct types.

The greatest drawback to cross-breeding is that it gets into the hands of unskilled men, particularly dealers who buy up lots of Merino ewes and join them to Longwool rams without any regard as to their being pure or just mongrels. It is this class of owner with this class of sheep and the wool they produce who is going to find himself in a hole, and a good job too.

The Climatic Outcross.

I have frequently been asked what is meant by the climatic outcross. From the result of my readings, conversations and general knowledge I will endeavour to give some information on the subject.

Outcrossing is the practice of introducing into a flock for crossing with it animals of the same genus and type of breeding, but which have been reared and bred for some years in a different part of the country under different conditions. For instance, if a South Australian ram were introduced into a Riverina flock, both sheep being of the same type with some similar environment, it is supposed that renewed vigour will be introduced without the loss of type. This climatic outcrossing counteracts any ill effects of in-breeding. It has been cited that stock taken from south to north do well, but that stock taken in the opposite direction very seldom are successful.

An illustration of the benefits derived from this outcross is quoted by Mr. G. A. Brown, who says:—"A gentleman had a dovecot on the English side of the channel, where he inbred his pigeons until they ceased to be prolific. As an experiment he established another breeding station on the opposite side of the channel, using the same stock. The birds carried to the English side became prolific, and their offspring, bred with the original stock, produced freely."

It does not necessarily follow that the experiment is always successful. It is always necessary to cross two families that have similar and some common characteristics, especially some similar foundation and blood.

Common Sheep Diseases.

By "WHITE TURK."

(Continued.)

Breathing Diseases.

Sheep suffer from disturbances of their breathing organs far more commonly than is realised except by the meat inspector. The symptoms are those of general organic upset, such as fever, lassitude, the desire to be alone, with the more special signs of difficult breathing, cough, snuffling, and very often standing aside in a dejected kind of way. If the more delicate diagnostic tests could be applied, the rise of temperature and various abnormal sounds would be found, but from a practical point of view we have to be content with the reddened eye, and increased cough or panting resulting from handling, to tell us that acute disease exists somewhere between the nostrils and the diaphragm or skirt, and, in the isolated case, we shall discover the particular form of trouble after death, whether this is natural or by the knife.

As a matter of fact, the whole catalogue of respiratory troubles may be found in sheep, but the nice distinctions noted by pathologists may be ignored by the sheep man, and the list may be divided into two broad classes, those that matter and those that don't.

In the former class come inflammation of the lungs and lining of the chest, pneumonia and pleurisy, bronchitis and all acute diseases; while in the latter are the mild catarrhs and coughs that arise from dust and similar irritants.

It is necessary to be able to appraise the value of any symptom in order to appreciate its importance as an indicator of the position and extent of the trouble. Therefore, let us picture a sheep suffering from inflammation of the lungs. At first lying apart, coughing when moved, a sticky, slimy discharge from the nose; later standing apart, with legs extended, short panting breath interrupted by fits of coughing; on being driven the sheep pitches forward on to his knees with a grunt and sharp fit of coughing, and most likely rusty coloured blood will streak the discharge from the nose; if so, the breath will be very foul, and if the disease is far advanced, the sheep, unable to rise, will pant its life away, and after death the nostrils will be surrounded by bloodstained foam.

Now, how is one to estimate the importance of the various symptoms, since individually they occur in quite different diseases. For instance, a sick sheep always prefers to be alone; a sheep with a coating of stinkwort round its nose will snuffle, so will one with maggots eating into its brain. Cough will arise from dust as well as from a broken rib. A sudden scare will make the sheep pant as badly as if the lungs were being choked by anthrax germs. A bellyful of rape will make the breath quite as foul as a broken-down lung. And so through the whole list of symptoms, so that to make sure of a disease one has to take the sum of their symptoms and be guided by the leading ones, as in the case of pleurisy there will be all the signs just quoted for pneumonia, which in practically all cases in sheep exists alongside pleurisy, and in addition a quick, half-suppressed cough and grunt when the side of the ribs is pressed, if the pleurisy is accidental, due, perhaps, to a broken rib. A little careful search will show the point where the pain is greatest, and the movement of the parts of the rib may be felt. Thus the sum of the symptoms aided by the special ones leads to a correct surmise.

Next comes the practical question, "What's to be done?" It may be taken as a general axiom that if a sheep is not very sick it is wise to refrain from making it so, while if it is, its skin is likely to be the best asset, but while there is much truth wrapped up in such generalisations it is quite possible to help nature, especially in small farm flocks, where sheep are used to being handled. As an all-round remedy for sheep who are not too far gone, a dab of Stockholm or pine tar on the nose or lips is an excellent remedy for lung trouble, and its efficacy is increased if a mixture consisting of equal thirds of tar, honey and saltpetre is used, the dose being as much as will hang to a teaspoon or bit of flat stick about that size. If the patient stays with the flock, once a day is all one may expect to be able to attend to it, but if it is brought in then it will be better to give it a dose two or three times a day; for pneumonia 5 drops of tr. bryonia may be added with advantage to each dose, and for

pleurisy 5 drops tr. phosphorus will be helpful, should the patient be of stud value. A little bit of nursing will be of great relief to the patient, and that means that its position should be changed every few hours, and it should be put on its legs for a while to pass water and dung.

So much for the main outlines of breathing trouble and its treatment; now for some of the symptoms in detail. First, snuffling. This indicates irritation in the breathing passages between the nostrils and the lungs; when excessive it is probably due to bots in the passage or to a catarrhal disease due to minute bacteria known as pasteurellosis; the latter will be dealt with when discussing general constitutional diseases, and the former among those due to large parasites. When it is not excessive, but persists, it is generally due to local irritation, and tar is not to be despised as a remedy, or a little warm solution of permanganate of potash, as much as will lie on a sixpence to a gallon may be douched into the nostrils occasionally. An effective way of doing this is to use an ordinary rubber human enema syringe, and give one squeeze of the bulb to each nostril. A good many score of sheep passing through a race can be dealt with in a very short time.

Cough is a symptom of both digestive and breathing troubles. In the former, stomach worms, fluke and similar parasites are the cause; in the latter, lung worms or specific irritants of the breathing organs. The cough of indigestion is generally a hard, dry one, while that of bronchitis and similar trouble is frequently deep and moist. The coughs due to worms, fluke and so on will be dealt with when those parasites are under consideration. For the neck or chest cough, tar comes well to the front again, but it will be an advantage to thicken the mixture given above with liquorice powder till it is a soft, sticky dough that will cling to the lips and teeth.

Panting, if due to fright, soon passes off; if arising from acute disease, such as pneumonia, it generally increases in frequency and shallowness as the disease progresses; if from accident, such as broken ribs, movement always aggravates it, while rest may cause it to cease altogether. When it is a marked feature of the disease, it calls for sedatives, and a couple of teaspoons of laudanum mixed with the tar concoction will give relief. If the sheep is bright and lively and yet pants excessively on movement, the trouble is probably local in the nose, such as a small tumour or worm cyst. In such cases relief often follows the injection of 1 teaspoonful of petrol in 4 of water, followed by a smear of vaseline.

Bleeding, when from the nose, is dark and venous, from the back of the nose red but scanty, from the lungs rusty red and the discharge is rotten. It seldom calls for treatment, because in the two first cases it may be ignored, and in the last it is too late to be of use.

Acute congestion of the lungs and their passages occurs after overdriving, long train journeys, lightning and similar conditions. The best and quickest way of relieving is to bleed; this may be carried out in several ways, all easy and effective. Run the knife through the division between the nostrils, slip it under the eye vein running from the inner corner of the eye down the face, or take the vein inside the elbow or thigh, raise the vein by pressure, and prick it with a small sharp knife. These veins are too large to cut right through, as may be done with the eye vein, but they will stop of their own accord when the pressure is taken off. One or two pints of blood may be taken in such cases, and it is well to measure it so as not to take too much or too little.

Drenching a sheep suffering from breathing trouble is not a desirable performance as a rule, though exceptions have to be allowed for, as when giving arsenic solutions for lung worms; but in all cases the standard position of making the sheep squat on its rump or slide on its back between the operator's knees cannot be upheld as the best position for either man or beast. When liquid medicine has to be given, it is far better to keep the sheep on its legs, just raising the head sufficiently to allow the medicine to run freely. There are excellent arrangements for giving an exact dose quickly; they are all based on the idea of a syphon tube or depend on clips on rubber tube, and descriptions of them may be found in most sheep literature. But for the man who has to undertake the job without special preparation, a quick and effective way is to have the bulk of the medicine in a kerosene can and two small bottles each holding a dose; while one is being used the other is being filled by an assistant. A man, a boy and a dog will soon make quick work of a small flock in this way.

The Dingo.—Some Methods of Trapping and Poisoning.

Observations on its Life and Habits.

Mr. Bruce W. Leake, of Cardonia, Woolundra, Western Australia, who enjoys a high reputation in the West as a master hand at the destruction of wild dogs, kindly sends us the following valuable article on the subject. Mr. G. L. Sutton, Director of Agriculture, writing in "The Western Mail," in which this article also appeared, says:—"On my first visit to Cardonia I was thoroughly impressed with the confidence which obtained throughout the district regarding Mr. Bruce Leake's ability to catch any dingo which came along within a radius of say 10 or 12 miles, and when I ascertained that he had evolved a simpler method of setting the traps than formerly advocated, and had studied the habits of the dingo with such good effect as to conclusively show that much of the elaborate precautions connected with the setting of traps was unnecessary, I realised that in the unassuming owner of Cardonia we had a 'master' trapper."

Mr. Leake writes:—

A short time ago, the Commissioner for the Wheat Belt (Mr. Geo. L. Sutton) asked me if I would make available the result of my experience in connection with trapping and poisoning dingoes. I have pleasure in acceding to his request, and will feel amply repaid if the following notes are of some help to those settlers who are keeping sheep in dingo-infested districts. I acknowledged with pleasure my indebtedness to Mr. D. Le Souef, Director of the Zoological Gardens, Melbourne, for the illustration of the pure dingo in Fig. 1; to Messrs. May and Crighton for the photo. of the trapped dog in Fig. 2; also to Mr. Geo. L. Sutton for the photographs from which the other illustrations were made. (For illustrations see page 441.—Ed.)

The writer lives eight miles from Woolundra in the heart of that immense belt of mixed farming country that stretches for miles north and south between the No. 1 and No. 2 rabbit-proof fences. Right through this area, dingoes are more or less numerous, and in a great many cases owners of sheep are obliged to yard them at night. This is extremely unsatisfactory, for in addition to the labour and trouble involved, the sheep do not keep in such good condition, the wool gets dirty and does not grow as well as when the sheep can be allowed to run free both night and day. Though originally this district was not less free from dingoes than many others where night yarding is regularly practised, such is not necessary at Cardonia, and this because the original "dingoes" have been destroyed by trapping and poisoning, and those which now arrive from time to time are trapped. It is far better to spend a little time trapping and poisoning, than much time driving and yarding. If all settlers would do a little trapping I am convinced that where settlement is not too sparse, there would not be much to fear from dingoes.

Dingo Characteristics.

None of the dingoes now found in the settled districts are pure. They are crossed and re-crossed with domesticated dogs until in some cases they have only about one-fourth of true dingo blood. This wild dog of to-day is a much more virile and powerful dog than its ancestor of thirty or forty years ago. It has blended in its make-up the sagacity of the domestic dog and the cunning of the pure dingo. It is a much more difficult animal to deal with than the original dingo, which could be kept in check with poisoned baits.

A specimen of the pure dingo is shown in Fig. 1. The colours of these animals vary from a light to a reddish yellow, and some are black. There is always a white tip to the tail, which gradually decreases in size as they get crossed with tame dogs. The pure dingoes found in the western part of Australia are frequently of a darker shade than those on the eastern side. No fossil remains of the dingoes of any age have been found in Australia, showing that they have been introduced here. It is thought that the dingoes arrived in this country before the aborigines.

One peculiar feature about the pure dingo is that, though it howls, it never barks. The howl is certainly uncanny, and heard for the first time on a dark night in a lonely spot, will never be

forgotten. When dingoes howl constantly at night not far from a settlement, it indicates that they are at home, and that they will not go a great distance to camp during the day.

Habits.

As a rule, dingoes choose a secluded spot to breed, and the puppies are born usually in a hollow log. They generally stop with their mothers for some time and are taught by them to hunt from their earliest days. The natives used to tame some of the young dingoes, but were never able to suppress entirely the wild instinct lurking within. For instance, one of these "tamed" dingoes following his black master would suddenly ramble off, and be ten or twelve miles away by itself the next day.

The dingo is suspicious, and before he can be trapped or poisoned his suspicions must be allayed by familiarity or overcome by need. An instance in this connection is illustrated by the following incident, which occurred at a small soak scooped out in almost white sand situated in the centre of a cleared paddock one and a-half miles from my house. A few weeks ago, the writer rode over one evening just before sundown to look at some horses. When within two hundred yards of the soak, a big brindle dog, with perhaps only a quarter of the dingo in him, ran out. My first impulse was to chase him, as there was a clear run of thirty chains. However, on a second thought, I did not, as it would have frightened him for trapping. He stopped and looked at me a couple of times as he scurried across the paddock and disappeared in the scrub. I then shifted all the horses out of the paddock, and the next day drove over to set some traps.

One trap was put near the bush close to where the trapper is standing (fig. 3), and another at the bush on the left side of the same illustration, and where the dog had made dung. I added a little more decoy dung, and buried the trap in the sand—an ideal place. At another soak 80 yards away two more traps were set. That evening I climbed up on a hill a mile away from the soaks and watched with a pair of field-glasses. Just as the sun was dipping, I noticed a dog proceeding towards the soak from the west. At the same time another could be seen approaching from the east. The one on the west stopped 200 yards from the soak, and the other circled around and joined him. One dingo was a lot bigger than the other. They seemed to hold a consultation, then walked back away from the soak and lay down. This performance was repeated several times, but they would not go towards the soak.

The next morning I rode over, and to my great delight, the big brindle dog had been caught in the trap near the bush on the left-hand side of the illustration (fig. 3). At the other soak a crow had been caught in a trap the previous day, and this is evidently what the dingoes were looking at, and which, as I saw through the glasses, had aroused their suspicions. Under cover of the darkness they became bolder as they became familiar with the presence of the trapped crow, and as their need for water became more pressing.

The next thing was to catch the mate, who never came back again to drink at these soaks. I set three traps half a mile away in a creek, where I had noticed recent traces of dingoes. A dead sheep was taken there and dragged. A week later a black and tan slut was caught. This was evidently a cross between a kelpie and a dingo.

A Discovery.

Because of his suspicious nature, it was deemed essential for successful trapping that very special precautions were necessary to prevent the soil around the trap becoming impregnated with the scent characteristic of human beings. Successful experience has shown, however, that these precautions are unnecessary, at least in settled districts, and in consequence an immense amount of the time required under the old system of setting traps is now saved.

Traps and Their Adjustment.

Dingo traps are procurable from dealers in ironmongery. They vary in weight from seven to ten pounds. The former has a width across the jaws of seven inches, the latter eight inches. The writer prefers the latter, because of the greater plate surface, and consequently better chance of catching a dog, but the smaller one has the advantage that it is lighter to carry on horseback. The beginner is recommended to obtain two of each size to start with; as success is achieved and his experience increases, additional ones can be obtained.

As a rule the traps arrive in good order, but sometimes they require a little adjustment. They should be carefully examined and overhauled before being used. When in proper working order the jaws should work freely, and when the trap is sprung after being set, the plate should drop completely down immediately it leaves the catch that holds it over the jaws. The aim in adjusting a trap is to have the tension strong enough so that a rabbit can walk over it without springing it, yet at the same time to have it weak enough for a dog to be caught.

To Test a Trap.

To test a trap, a piece of wood or stone a little over two ounces in weight may be dropped on to the plate of the set trap from a height of two feet immediately above it. This should just set off the trap nicely, and if so it may be considered to be properly adjusted. If less than two ounces will set off the trap, it springs too easily, and the notch into which the catch holding down the jaw fits should be filed a little deeper with a flat file.

When the trap is set, the plate should be just a little higher than the jaws. Sometimes, and especially after filing the notch referred to, it is much higher, and must then be lowered. To do this, with a hammer bend just a little back away from the jaws the piece of steel to which the catch already referred to is fastened. A trap should always be retested after catching a dog or kangaroo, as it often gets knocked out of shape through being dragged about by the animal. It should also be tested after being set in wet ground for some time, or if it has become rusty from some other cause.

Decoys.

The dingo is curious, and by taking advantage of this characteristic, his suspicions can be allayed and he can be decoyed right up to the trap and into such a position that it can perform its work effectively. Fully eighty per cent. of the dingoes trapped by the writer have been caught with dog dung used for a decoy. Fig. 4 is a photo. of Kelpie, who is tied up a good deal, and who keeps me well supplied with the necessary decoy, and who has thus been indirectly responsible for catching twenty-two dingoes during the past two years.

The urine of a dog is a good decoy; it requires renewing often, as it evaporates quickly. Rancid lard, or dripping with a smell I have used with success, and have also tried two manufactured decoys, but failed to trap a dingo with either. However, any new decoy is well worth trying, as one kind might entice one dog and to another it would have no attraction.

Suitable Location for Traps.

Having procured the traps and decoy, it is then necessary to find suitable places at which to set the traps. It is useless to put traps in cleared country, unless it is at a dam or soak where the dingoes are coming to water. The dingo as a rule chooses a thick patch of scrub to rest in during the day. When night falls, he slinks away, and perhaps gets on to a path, an old road or a creek, and follows it for a time. If you know of any such places, not less than a mile from a habitation, ride or walk along, and look for the tracks of dingoes. Look carefully to see if there is any dog dung on a small bush or grass tuft, or dog scratchings in proximity to one. Generally the dingo chooses a spot for this in some scrub or on the edge of it, just before the scrub ends and open country begins. The dingo thus prepares himself for a long run. He feels secure and safe in scrub, and will linger a little while here, as when once the open country is reached, he generally keeps moving.

If you notice any of the above signs which indicate that a dingo has been going or coming, you will know that here is a good place to set traps. It is, however, not much use setting traps along a road with much traffic, even if dingo tracks have been found on it. If, however, the road is an old one which is no longer used, and it passes through a patch of scrub and you notice some fresh dog dung on a little bush, here is a spot for a trap, and if the bush is in the middle of the old road on which is no traffic at all, you can set a trap near this, and add some more dung as decoy. If, however, the road is used, even if only occasionally, follow it a few yards from this bush, and pick out another bush about four feet from the wheel tracks; in some sand for preference, or where the ground is not too rough. Fig. 5 illustrates such a spot, and the trap is placed on the ground, where it is eventually to be set. The decoy is to be placed just at the foot of the dark bush at the back of the trap. The centre

of the latter is placed two feet from where the decoy will be, so as to provide that the feet of the dog shall be over the plate of the trap when he commences to examine the decoy.

An Example.

In 1912 I erected a netting fence enclosing 2000 acres ten miles from my home. I might mention that where I live, with the exception of five small pig-netting paddocks, the property is enclosed with ordinary wire fencing. The netting fence referred to was erected four feet two inches high, with rabbit-proof netting at the bottom placed four inches beneath the ground. One barbed wire was put eight inches from the ground, and three more above the netting. The latter was tied to one of these, and the other two were above and 5 in. apart. The three top barbed wires were laced twice between the posts, which were 12 ft. apart. This block of country was isolated, the nearest neighbour who kept sheep being seven miles away. This fence kept the dingoes out for six years, when they started getting in and out of the paddock by crawling between the barbed wires, which were only 5 in. apart.

I then commenced trapping, and in six months caught twelve dingoes within two miles of the paddock, one being caught inside in the act of getting out of the paddock. Still, there were the tracks of two dogs I had failed to trap. One of these eventually jumped the fence and killed some sheep inside. These dingoes were cunning. They had heard the snap and ring of the steel trap, as one of their mates had been caught, and they were suspicious of any soil that was disturbed.

Tricks.

The summer came, and I discovered a dam on an abandoned farm, where they sometimes came to drink. Fig. 6 shows where I caught one dog. This was in the small three-cornered enclosure. This was erected to keep horses from the trap, and the water level came at that time just to the edge of the enclosure. At the same dam (fig. 7) a trap is shown being set 18 in. from the water. This trap must be in wet soil, and in the drift sand where the water flows in, if possible. After setting and covering the trap, put the decoy in position, and then splash the water gently over the trap and your own tracks.

Fig. 8 is an illustration of a trap completely set near a dam, the stick marking the spot where it is placed. One of the dingoes referred to above was caught at this dam, and the other the same way at an adjacent soak. The trap here was set 6 ft. from the water in wet soil, the water being splashed over as before. At first when they came to drink they would not go near the enclosure, but after a while familiarity bred contempt, and curiosity got the better of them. I now keep six traps continually set around the netting paddock. Although several dogs have since been caught, none have got inside.

Fig. 9 shows a corner of the paddock. A trap was put where the hat is lying, the decoy being against the survey post, 2 ft. away. A rabbit set the trap off. This was thrown about six yards into the paddock and created a smell. A short time afterwards a dingo was caught, and a little later another. This is in gimlet wood country, and a crowbar had to be used to dig the hole for the trap.

Good Places for Traps.

Fig. 10 represents another spot in the bed of a creek along which the dingoes used to travel. A trap was set a chain from the fence, where the hat is placed, in stream-washed sand. At the back of the hat is a big prickly bush, and just at the foot a decoy of dog dung was put. A dingo was caught, and after being skinned was carried and placed inside the paddock about eight yards from the fence. Two more dogs were caught shortly afterwards in the same spot, making three altogether in two months.

Fig. 11 is a picture of a creek in the midst of a salmon and white gum forest. One day I noticed the traces of a dingo which had been up and down this, and had stepped from a stone at the back of the hat on to a patch of sand where the hat is in position. First of all I brought a dead kangaroo that had been caught in another trap three miles away. This was dropped in the bed of the creek to act as a lure, and two traps set, one on each side of it with decoys. The next week, when I visited these traps, a dingo was caught in the one which had been placed where the hat is shown in the illustration.

(To be continued.)

Pastoral Problems.

BY CROWFOOT.

The time has arrived when different methods should be adopted in working sheep on holdings from the old slipshod way that was applicable when paddocks were large, grasses and herbage untainted, and wages low, and when the only thing that killed sheep, other than dogs, was old age.

Pastures from constant stocking have become stock sick, and the plant life less nutritive. Every sheep that leaves a run takes something out of the soil that its excrement does not balance, a great deal of potash goes away in the wool, and other elements in the carcass, and no effort is ever made to restore this denudation.

Flocks on many large runs are too big for anything like proper supervision, and in many cases are not sufficiently watched and looked after. At lambing time one seldom sees a man going through the ewe paddocks, and when he is seen it is often with a tribe of dogs, amongst which will be seen one for fox killing. This is wrong; no dog of any description should be allowed amongst the ewes at lambing time, or within a month before, because at that critical period the ewe becomes very nervous and easily excited, and if disturbed it takes days before she is normal, and often aborts the lamb.

Ewes lambing should be quietly seen to every day, Sundays included. If the proper man is employed, and does what is required, he is worth any wages going, and the sheep come to know him so well that he can nearly put his hand on them in the open. I know one man who this year supervised a lambing flock of ewes numbering about two thousand, and marked 80 per cent., and did not lose a lamb in the dropping period nor a ewe from fly. Certainly, he lived with them the whole period from before they left camp in the morning to when they lay down at night. He was not the owner, but on good wages. Shepherds of this stamp, I know, are scarce, but they can be got, and there would be more of them if they were caught young and taught, as was done in the old shepherding days. Certainly, in those times masters took more interest in their employees than they do now, but this estrangement has been largely brought about by union bosses, &c. On large stations, with the very large area of each sheep paddock, it becomes unpayable to give each flock the care and attention they require. In fact, in the near future big sheep runs will not pay to hold; the burden of taxation will be too great, coupled with the ever present shearing troubles.

The advantage of comparatively small enclosures is that it enables more sheep per acre to be carried, because the pasture can be eaten off evenly, without waste, and the areas can be kept free of fly-breeding carcasses. Any dead animal can be seen and buried, which is impossible on areas of eight and nine thousand acres in a single paddock. I agree with the writer of a letter in a recent number of *The Review* that we are fighting the fly with the wrong end of the stick. By killing the maggot we are "ketching the fly where the feathers are short." When the maggot is destroyed we kill generations of flies, but when we kill some flies—because we can't catch them all, not by a million—we leave a greater food supply and an intensified blowing capacity for the thousands uncaught. Nature fights to preserve the species.

Greater individual care is more necessary now than in by-gone times, because the plant life is not as varied. Many of the best have been totally eaten out by over-stocking and rabbits, and the land has been materially depleted of some of the best plant foods. If a holding could be thrown out of grazing for three or four years it would recuperate, but that is not practicable in these necessitous times, so we have to make the best of a bad job, and trust to droughts to do the resting. Anyone with a rough knowledge of plant growing or gardening knows what care and attention plants require to give the best results, and animals are only plants in another form.

The Care of Dams.

The following article was read in the form of a paper by Mr. R. Thomas, before a recent meeting of the Mount Bryan East branch of the South Australian Agricultural Bureau :—

Before excavating a dam, care should be exercised in selecting a site which will minimise the attention required to keep it in order. The site selected should be out of the line of dust storms, as these will help to silt a dam and do injury to the wool of sheep watering at them. Keep out of the centre of a big watercourse, as the dam may have the banks washed away and become partly filled up. Better have it to one side, and a strong bank to carry the stream to dam, so that the flood waters will do no more damage than cut a few gaps in the banks, which can soon be repaired.

Ascertain the quality of ground by putting down a hole before excavating. Damp the samples of earth from different depths and mix them into mud. If there is sufficient clay it will become sticky. If it becomes crumbly and free to handle it will probably be a poor holding dam. Also examine the catchment and see what possibilities there are of increasing it should it prove inadequate. If one pays attention to the above subjects before deciding on a site I am sure it will be to his advantage.

Leaking Dams.

This is very annoying when a dam that was urgently needed proves to be almost useless. Steps should be taken to try and make it hold, and this, as a rule, can easily be done in the summer time. When water runs into the dam put on as many sheep as convenient as soon as possible to puddle the bottom. Keep the sheep on it as long as they can get a drink. Then bring thirsty stock to it and allow them to run through it, afterwards watering them elsewhere. When a dam leaks at the bottom a team of horses or bullocks driven through several times, when there is about a foot of water, will help considerably. Dragging a tree through it may also give beneficial results. If there are patches of pure sand these should be scooped out and good clay put in its place. When there are deep holes in the bottom and all the water has leaked through them, these should be rammed in tightly with good clay. However, a dam generally improves as time goes on, and a dam that is a poor holding one when new will probably give satisfaction later on ; but when cleaned out the old trouble may occur again.

Insufficient Catchment.

This is a common trouble, and in most cases can be very much improved by adding drains. With the aid of a spirit level, and commencing at the head of the old drain or at the dam, one should follow up at a grade of 1 ft. or 18 in. in 100 yards, or whatever is suitable to the country. Care should be taken not to have them too steep, as a gutter or creek may be the result. The drainage system may run into miles, but a medium-sized dam with a good catchment is better than a large dam with poor catchment. These drains should be one ploughing, deep and sufficiently wide to carry the water required. The larger the drain the less attention it will require. These wide, flat drains do not wash into gutters as readily as narrow, deep ones. A buck scraper scoop should be used in making drains, as it makes it possible to build a high, even bank. Always be careful to put extra earth at low points. The drains need attention after heavy rains. Washed out gaps should be repaired, and deposits of sand and rubbish removed. A well laid out drain may be very crooked at places, but, the gradients being all the same, the water will run well, evenly, and steadily.

Silted Dams.

Such dams make endless work, for, as soon as the excavation has been cleaned out, the silting process begins again, so that it is important that this part of the care of dams should never be neglected. Silting is caused in two ways:—(1) Earth and rubbish washing or blowing into dams, and (2) sediment from muddy water. A silt scoop will be found very useful, because when a dam becomes boggy around the edges the wet mud can be removed while water is still in the dam, which makes the batter clean for stock to go into, and also saves waste of water evaporating from several feet of wet mud round the edge of the water. It is surprising the large quantity of silt that can be removed in a comparatively short time. The silt scoop will not do a perfect

job, so that when the dams are getting low the opportunity should not be missed of taking out that which the silt scoop has left. Good work can be done while there is still some water in the dam with a plough and scoop. If rain should fill the dam before it is quite empty it will have been practically cleaned out, and it may be years before it is as low again.

Washed-in Dams.

This trouble is more common than it should be, and a dam in this condition loses a lot of its usefulness. Steps should be taken to remedy it as soon as possible, or the dam will be ruined. Where a dam has no front bank and is washed into gutters, there should be a new batter made by taking out a strip of earth sufficiently wide to remove all the gutters, and the earth used to make a bank along the front. An inlet should be made either along the front or in one of the corners. A dam so repaired should have an inlet built in, or another washout may occur. In my opinion concrete makes the best job. Where a gutter has been washed at the intake there should be an inlet built in. Great care should be taken that the water cannot get under the inlet and wash out a tunnel and cause the work to collapse. Galvanised iron is often used for inlet chutes, and sometimes a temporary repair can be made with brushwood.

Wave-splashed banks occur when the dam is a large sheet of water, and on a flat where the wind has full play on it. In reservoirs broken stone is laid on the inside of the banks, but a log fence with earth and stone packed behind serves the purpose quite satisfactorily with dams. A catchpit is very necessary in front of a dam. It is easier to clean out a catchpit than the dam, and it also prevents the dam from becoming too boggy. It should be so arranged that the flow of water will be checked, thus causing most of the silt to settle before going into the dam.

Big drums are often constructed so that water has to pass through a chute, thus allowing water to enter slowly. A very heavy flood will sometimes burst over the bank, so that care should be exercised in the repair or the water will filter through and eventually wash it out again. The sides should be dug down and all lumps broken, and the bottom corners rammed. The gap should be wide enough to allow the team to go through, as they will tread it down firmly as it is being filled. The repairs should be made higher than the old bank to allow for it settling down. Damp earth from the dam will make a good repair, as it will hold better.

Evaporation takes away several feet of water every year, and I know of no practical and economical way of preventing it. But by keeping the wind from the water and having the dam in a sheltered place, or building high banks all around the dam, the wastage will be minimised. All wet mud and sand should also be kept away from the edge of water. The best precaution against evaporation is to make the dam at least 12 feet deep.

The Campaign against Drought.

An Important Conference.

A very important conference, called by the Government, was held in Sydney at the end of last month with a view to planning some system of national insurance against periodical droughts. The question, of course, involves the greatest problem that faces the producer, and the progress of the campaign thus inaugurated will be followed with the closest interest.

The State Treasurer (Mr. Lang) presided, and the following were present:—Mr. P. F. Loughlin (Minister for Lands), Mr. W. F. Dunn (Minister for Agriculture), Mr. G. McGirr (Minister for Public Health), Sir H. Y. Braddon (Sydney Chamber of Commerce), Mr. G. L. Archer (Commercial Banking Co. Limited), Mr. W. Potts (Bank of New South Wales), Mr. Franc B. S. Falkiner (N.S.W. Sheepbreeders' Association), Mr. John Mackay (Graziers' Association of N.S.W.), Mr. W. W. Killen (Farmers' and Settlers' Association), Mr. Charles Binnie (Stockowners' Association), Mr. C. J. McRae (Primary Producers' Union), Mr. Valder (Department of Agriculture), Mr. J. B. Cramsie (Metropolitan Meat Board, and a prominent grazier), and Mr. W. J. Cowie (Government Insurance Branch).

The discussion, as was to be expected at these preliminary proceedings, was of a general character, but it became

apparent that the problem would have to be considered under such separate heads as finance, fodder conservation, water conservation, and the use of the railways in carrying fodder and stock.

So far as finance was concerned, Mr. Cramsie submitted figures to suggest that, if the Government and the pastoral organisations together could make £1,000,000 a year available, it would be practically possible to build up an organisation to supply sufficient fodder to meet the demand in time of drought, and which in five years would become self-supporting.

It was pointed out that the organisation of railway facilities was highly important. The railways should be used at certain slack times to gather fodder from various districts and concentrate it at points where it could be most usefully availed of in time of need. This would obviate the pressure on the railways which now developed in drought time, when there came an acute demand for the carriage of stock and fodder, at a time when there was difficulty in getting sufficient water for the engines. In this connection a scheme was mentioned of encouraging farmers generally to grow large quantities of fodder in the good seasons, when it could be purchased and handled cheaply, and stored against the inevitable drought.

The conference appointed sub-committees to consider the various problems which come under the general heading of insurance against drought. Those present formed themselves into a general committee, which will meet every week. The reports from the sub-committees will be received and considered, and it is hoped that within a few weeks it will be possible to evolve from the material thus gathered a practicable scheme for submission to Cabinet.

Mr. J. B. Cramsie, who has devoted much time and thought to this important problem, has evolved proposals on the following lines:—

1. To secure first-class fodder in good seasons at reasonable prices, and hold it at certain centres in anticipation of drought requirements.
2. To induce farmers to increase their areas of hay fodders by offering to purchase surplus products at reasonable but payable prices. Such schemes must necessarily assist a closer settlement policy, which is necessary for our progress.
3. To select proper centres for such supplies of fodder so that a minimum of rail carriage will be required, and to see that such supplies are properly protected.
4. To induce graziers to provide supplies of drought fodder on their own account.
5. To endeavour to induce lessees on irrigation areas to grow crops and store ensilage to meet drought requirements, and thus give them further opportunities of becoming successful settlers.

Arrangements should be made whereby £1,000,000 a year is jointly subscribed by the Government and the man on the land to purchase fodder, to be stored in centres where grown, and thus be available for transportation by railways to the nearest spot where drought conditions rule.

"During the recent drought," said Mr. Cramsie, in explaining his proposal, "immense supplies of fodder were brought from the south to the extreme north-west points, whereas the whole of the supplies for the north-west should be secured from the north handy to drought areas from stocks held at different centres in that locality, where, as a rule, excellent crops can be grown.

A board of management would be created, with a representation of the Government and pastoralists, and in order to secure supplies the State would be divided into ten districts, each district to provide a certain quantity of drought fodder. In each district a committee of representatives of graziers and farmers and settlers would be elected to act with the central body to superintend the work of growing or securing the quality required. Farmers and settlers and graziers would thus be brought into co-operation in securing supplies of fodder in the most efficient and economical manner.

Under Mr. Cramsie's scheme, a network of railways for the rapid transportation of stock in times of drought would be necessary, and be a direct charge upon the pastoral industry for portion of the annual revenue required.

Scrip for the amount of the investor's interest in the scheme could be transferable, so that if one pastoralist sold out to another he could at the same time transfer his scrip, which would give the purchasing grazier the same right to draw the value in fodder from the pool. Arrangements could be made for any grazier's accumulated interest to be paid in scrip for fodder if so wished.

Blowfly Experiments.—Dalmally Station, Queensland.

On the 13th of last month a very representative gathering of pastoralists, in response to an invitation from Mr. W. A. Russell, of Dalmally Station, near Roma, Queensland, attended a demonstration at that station of methods which had proved to afford sheep a very substantial protection against the ravages of the blowfly pest. The demonstration was under the auspices of the Queensland Blowfly Committee and the Commonwealth Institute of Science and Industry. Amongst those who attended were Mr. G. H. Knibbs, director of the Institute of Science and Industry, and the following members of the special Blowfly Committee:—Mr. S. P. Fraser; Major Cory, Chief Inspector of Stock; Mr. W. G. Brown, Government Sheep and Wool Expert; Mr. J. Henderson, Government Analyst; and Professor T. Harvey Johnston, of the Queensland University, who has charge of the biological side of the research.

It was quite evident to all who attended the demonstration that the pastoral industry owes a good deal to Mr. W. A. Russell for the very patriotic and generous way he has assisted the Queensland Blowfly Committee. He has placed his station and his large flock of valuable sheep at the disposal of the committee for experimental purposes, and in addition, it was quite evident that he has incurred very considerable expense in the erection of dipping baths, spraying plant, &c., to aid the experiments.

The results of the Dalmally experiments to date were very clearly set forth in an address Mr. Russell delivered to the guests assembled. He claimed that an outbreak of fly attack can be stopped immediately by the process of jetting with strong arsenical dip, which will kill all maggots, and arrest further infestation for the time being. He stated that he had obtained complete immunity of from three to four months as the result of jetting, and claimed that if all sheep men had jetting outfits ready for immediate use there would not be in the future such serious losses as have occurred in the past. Mr. Russell quoted an instance where, last year, two stations had no jetting plant ready, with the result that they were unable to cope with the fly attack, and in each case the losses were reckoned at more than 15,000 sheep. Mr. Russell stated that jetting with poisonous dips, with arsenic added, costs about 1-5d. per sheep.

Professor Harvey Johnston, of Brisbane University, delivered an address, which was listened to with very great attention, and all present appreciated the fact that the Professor did not take advantage of the occasion to show what he knew, but rather stressed the points on which he was ignorant, and on which further information was required in order to assist the biological aspect of the work of the Blowfly Committee. Professor Johnston asked pastoralists to assist him in this work, which calls for investigation upon the following lines:—

1. Exact knowledge as to the various kinds of blowflies which frequent sheep, especially those bred in sheep.
2. Does any particular species initiate the condition and become the means whereby others may be induced to attack.
3. Determination of predisposing factors.
4. Seasonal prevalence of the different kinds.
5. Locality prevalence of the different kinds.
6. Testing of various traps and baits, also poison bags.
7. Range of flight from known breeding places.
8. Enemies of adult flies.
9. Determination of breeding places other than sheep.
10. Study of biology of each species, especially period elapsing between the deposition of eggs or maggots by female and emergence of adult.

11. Use of the various chalcids—this involves careful study of the chalcids themselves.

The following is a summary of results obtained by Professor Johnston and his assistant in the University Laboratory, regarding the chief blowflies, viz.:—(1) The sheep maggot fly (*Chrysomya rufifacies*); (2) small green blowfly (*C. varipes*); (3) coppery and green flies; (4) common bluish blowfly (*A. augur*); (5) small shining black fly (*Ophyra ingra*); (6) flesh flies.

Eggs hatched out in the case of most of these in about 17 to 19 hours, and the resulting maggots usually feed for from 4 to 6 days. Then follows a period of 1 to 5 days (flies Nos. 1 to 4), during which the larva rests prior to pupating. The *Ophyra* and *Sarcophaga* take much longer (10 to 25 days). Thus the maggot stage occupies from 4 to 8 days in the first four blowflies, and 15 to 30 for *Ophyra*, and 15 to 17 for *Sarcophaga*. The pupal condition occupies four to six days or more in the case of Nos. 1 to 3, and 8 to 20 for the others. Thus the number of days elapsing between the depositing of the egg by a female, and the hatching out of its progeny occupies from 9 to 14 days in the case of the three metallic flies, and 19 to 40 for the others. The longevity of adults, bred and maintained in captivity in Brisbane, is from 13 to 30 days.

It is not known how long they live under natural conditions. A fact of importance in regard to control by parasites is that only 4 per cent. or less of the pupae of these flies are normally to be found occurring on the surface of the ground under shelter, the rest having burrowed as larvae into the soil.

The tiny chalcid wasp, which has been liberated to control the spread of various flies, has been found to require about 14 days from oviposition to the hatching of the wasp. The female soon seeks out a suitable fly pupa, and each deposits a varying number of eggs (about 20 generally) in them, and the developing grubs destroy the pupa. Besides this parasite, several others have been studied in the University laboratory. One requires 28 days, and another needs about 21 to 28 days for development. These two differ from the chalcid in that there is usually produced only one wasp from each parasitised fly pupa. There has been discovered a quite different wasp parasite which attacks the maggot stage of the various blowflies, the maggots subsequently pupating and becoming destroyed in the pupal condition, a number of wasps emerging instead of a fly. From 21 to 23 days are required for the development of this parasite.

All present were provided with an opportunity of inspecting a sheep dipping bath, overhead shower dipping plant and jetting plant in operation, and Mr. W. G. Brown explained methods of using these plants, and answered the very numerous questions put to him.

Altogether a very enjoyable day was spent at Dalmally, and everybody left the station full of appreciation of the public spirit and enterprise of its owner, and of the very sumptuous hospitality which was extended to the guests by him and Mrs. Russell.

Anthrax Spores in Wool.

A London cable reports that in consequence of the constant increase in cases of anthrax, the majority of which arise from the handling of wool, the question of compulsory disinfection of wool and goats' hair before export appears on the agenda of the International Labour Conference, under the aegis of the League of Nations at Geneva on 25th October. British technical experts ascribe the principal responsibility to the East Indian hair and wools. A questionnaire on the subject is being circulated amongst members of the League.

It is recognised throughout the world that Australian and New Zealand wool is to all intents and purposes free from infection. This is admitted in the International Labour Office's pamphlet on "Disinfection of Wool Infected with Anthrax Spores," which classes Australian and New Zealand wool amongst those that are practically innocuous. Such being the case, it is not at all likely that it will be found necessary to disinfect staple exported from here. Reference to official figures shows that the average number of deaths from anthrax in the Commonwealth has been only 3.636 per annum during the 11 years 1909 to 1919. Although no definite evidence can be quoted as to the source of infection, it is known that cases have been traced to bristles in brushware imported from Japan, the handling of hides, and other causes, but none are known to have been attributable to infection from wool.

Letters to the Editor.

The African Meercat.

To the Editor.

Sir,—I have read with great interest Mr. J. Cole Rous' letter on this subject, and agree with all he says as to the usefulness of such an animal as the African meercat in keeping down rabbits or other rodent pests. During the war we had a great part of our record wheat crop of 1917 destroyed by a plague of mice. No doubt there are many small carnivorous animals in other parts of the world, which, if introduced and bred up in Australia, would soon deal with these rodent plagues, but the thing cannot be done because of our Australian political conditions. Our Government absolutely forbids by law the introduction of any small carnivorous animals, or any cultivated natural diseases, for the purpose of dealing with the rodent or other pests. The reasons given for this legislation are that the introduced animals might themselves become pests, and the diseases become a danger to the public health. The real reason is that the Rabbit Catchers' Union, supported by the other labour unions, and by the large vested interests of the rabbit exporting companies, and poison importers, have a stronger political pull than the pastoralists and farmers.

We also have a compulsory poison law, which compels every landowner in the Commonwealth to continually poison his land, from year's end to year's end, with strychnine, arsenic, cyanide, and phosphorus baits. This law, by keeping the country always covered more or less with the carcasses of poisoned rabbits, has almost, if not quite, exterminated all our small indigenous carnivora, which were very numerous when sheep-farming first began in Australia. We had practically no pests for about 90 years after colonisation began here.

This wholesale system of poisoning has had another quite unexpected result. Insect-eating birds have been largely poisoned off by taking the baits laid for rabbits, and the blowflies, by reason of the enormous number of dead carcasses left about, have increased to such an extent that, for the greater part of the year sheep must be mustered and dressed for blowfly maggots about once a week—notwithstanding which, the losses are very heavy. Of course, under such conditions if a million South African meercats were introduced and turned loose amongst the rabbits, there would not be one meercat left alive in a month. The most serious thing about the blowfly pest is that the high-class Merinos, which produce ten or twelve pounds of very valuable wool, are most subject to attack by the blowflies, the poorest wool-producing sheep being least liable, but all are more or less liable to attack.

For the first 90 years after Australian settlement began sheep were shepherded and yarded every night, or "kraaled," as in South Africa, in dog-proof yards, for protection against the dingo, or indigenous wild dog, which is the largest carnivorous animal in Australia. During the whole of that time innumerable efforts were made to introduce and acclimatise rabbits and hares—for sport—without any success anywhere. As soon as they were let loose none was ever seen again, being at once destroyed by the small marsupial carnivora—tiger cats and native cats (*dasyurus*)—which were very numerous all over the continent, and in their ferocious lust for killing, apart from what they wanted for food, were unequalled by any animal found in any other part of the world. About 1870, when the sheep had increased to many millions, and Australia had become the leading wool-producing country of the world, the pastoralists began to substitute running their sheep in open paddocks for the earlier system of shepherding and "kraaling" at night. Then a crusade of poisoning began to get rid of the dingoes. The country was "salted" year after year with poisoned baits over all the land used for sheep-raising. The dingoes were got rid of on the sheep runs, but of course not on the much larger unoccupied areas of the Australian continent. The gain of

the new system was that one boundary rider could look after about 10,000 sheep, instead of requiring one man for every 1000. The sheep and wool returns, of course, increased by leaps and bounds, but there was a drawback. Within a few years the grass-eating marsupials increased to such vast numbers that, in spite of bonuses, it looked as if the whole country would be eaten out. The destruction of the dingoes had made a free breeding ground for the grass eaters.

That pest was got rid of in a short time by the Americans discovering the value of marsupial skins. Their buyers came here, and bought up the skins at from 6s. to 12s. apiece, and the pest was "shot out" at a profit, and all seemed well. But, in clearing off the dingoes, the sheep men had also cleared off all the dasyuri, iguanas, and other small carnivora in the sheep country. Then hares and rabbits were introduced for sporting purposes, and a free breeding ground having been provided for them (contrary to the experience of the previous 100 years) they increased by millions, and overran the whole continent. Then all the States began to pass drastic compulsory poison laws, for the purpose of exterminating the rabbits. That was about 30 years back. But as the first effect of the poison laws was to destroy all the small carnivora in every area where they were applied, everything that would eat a rabbit, young or old, was poisoned, and a free breeding ground was provided for the rabbits.

That policy only added fuel to the flame, and soon developed the blowfly pest, which now seems likely to become worse than the rabbit pest. The result in New South Wales (which is my own State) is lamentable. In New South Wales in 1892, with only two-thirds of the area watered and stocked, there were just on 63,000,000 sheep. Now, with almost the whole area watered and occupied, and tens of millions of money spent in the last 30 years on artesian bores and other improvements, there are less than 30,000,000, and the decline is still steady. Under these circumstances it seemed to me there was nothing to be done but to "stand from under," and I am not now writing as a pastoralist, though for more than sixty years all my interests were in that industry.

My reason for writing fully in reference to Mr. Rous' letter is the hope that, by giving South Africans a summary of our Australian experience, most of which is within my own personal knowledge, they may be taught what they should not do, and in this way I may render them a service. I have met a good many South Africans, and liked all I met.—I am, Sir, &c.,

W. E. ABBOTT.

Wingen, N.S.W., 22nd May, 1921.

To the Editor.

Sir,—Mr. J. C. Rous' letter in your last issue on the meercat was so interesting to me that I thought I would mention that the introduction of the stoat and weasel in New Zealand has been of wonderful benefit in fighting the rabbit pest in the hill-grazing country in the south of the South Island. Sheep runs there, which in the nineties were denuded of all pasture, are now coming back to their pristine grazing capacity, rabbit trappers have been dispensed with, and after one good poisoning in the valleys after the first fall of snow on the hills, the stoats and weasels keep the pest in subjection.

I lived for years when a boy in these hills, and when I occasionally take a trip back I can notice how the silver tussock has crept up to the snowline and thereafter the snow grass has come back till it has nearly reached the highest peaks in many places. Twenty years ago these same hills were huge heaps of running gravel.

The New Zealand Government has at last recognised the stoat's worth, and the Minister of Agriculture, Mr. Nosworthy, has a stoat breeding establishment, where the farmers can procure same to liberate on broken rabbit-infested country. If stoats were liberated in the Eden-Monaro district of New South Wales, Tasmania, and on the coast of Victoria and south-east South Australia, they would thrive there and be of wonderful benefit. The interior is too hot for them.—I am, Sir, &c.,

Riverina, N.S.W., 1st June, 1921.

INTERESTED.

To the Editor.

Sir,—I read with great interest the letter from your South African subscriber, Mr. Cole Rous, suggesting the usefulness of their native meercats as rabbit destroyers.

We imported a few years ago several pairs of the Indian mongoose to experiment with them on the rabbit. They arrived during the winter, and felt the cold very much, so we did not turn them out until the beginning of summer. (I might mention they made no hesitation in killing a rabbit if introduced to their cage.) They were taken out and let go in a rabbit-infested spot near a tank. On being released they immediately dived down the burrow, and we saw no more of them, and did not notice later any signs of their work in the vicinity. These carnivora, coming from a tropical and moist climate, would naturally not be at home in a temperate and dry one. They probably did not breed.

South Africa is a country not unlike our own, and its type of mongoose should be more suitable to conditions here. The meercat, to do any good in Australia as a whole, must essentially be a rapid breeder (this Mr. Rous did not mention). Providing the meercats are quick reproducers of their species, I am of the opinion that if given a good start they would do much in ridding us of one of our worst pests.—I am, Sir, &c.,

B. H. McLACHLAN.

Paratoo, South Australia, 3rd June, 1921.

To the Editor.

Sir,—Re Mr. J. Cole Rous' letter on the S.A. meercat and the Australian rabbit plague, this letter shows a good grasp of the situation here, and I for one strongly favour giving his plan a trial.

The meercat's assistance in destroying ground birds would not be required, the fox and rabbit poison have just about finished off that little contract.

The balance of nature has been badly upset in Australia. Something pretty energetic is required to restore it, for the destruction caused by rabbits is appalling, and it is a cruel sight to see the sheep, even in good seasons, living a life of semi-starvation, because the rabbits only leave them the coarse, unpalatable innutritious herbage, in fact the husks that the swine (rabbits) would not eat.—I am, Sir, &c.,

R. F. DANCOCKS.

Casterton, Vic., 4th June, 1921.

To the Editor.

Sir,—I was much interested in a letter appearing in your last issue, "The South African Meercat and the Rabbit Pest," signed J. Cole Rous. I have had thirty-five years' experience of dealing with the rabbit pest in hilly country, and could never yet sit back and say the job is finished. So you can imagine how gladly I welcome any scheme that promises to lighten the burden.

It would be impossible to estimate the damage done by the rabbit, but if we consider the vast destruction done to grass land and crops, the money, energy, and time spent in the endeavour to keep the pest within reasonable bounds, I guess if we had it all in hand to put into more production and improvement of property it would be the means of brightening the financial outlook considerably, and cheer the hearts of many thousands of landholders.

It appears from Mr. J. Cole Rous' letter that the meercat would do for the fun of the thing what so many have been earnestly striving to do for many years. The question is how to get a move on to have the matter thoroughly investigated with the view of giving it a trial. If the meercat will follow into the burrow and kill, that will be cutting "bunny's" retreat off properly. He would be shorn of his strength.—I am, Sir, &c.,

W. E. TOM.

The Grange, Chintin, 30th May, 1921.

Carrying Stud Sheep on the Railways.

To the Editor.

Sir,—Owing to a recent experience of the treatment meted out by the Railway Department to travelling stud sheep, I am prompted to offer, through your valuable columns, a suggestion that may, if the Commissioners are sympathetic to

wards the greatest industry that Australia has, be a means of securing rapid transit instead of the unnecessarily slow transit as at present is the case. On Thursday, 28th April, I loaded a truck of special stud ewes and lambs at Ferndale at 1 p.m. Their destination was Lyndhurst, some 250 miles away, and they arrived there at 10.22 p.m. on Friday, the journey occupying approximately 33½ hours. They had to remain in the trucks all night, and were unloaded at 6.30 a.m. on Saturday, being 41½ hours in the truck. A good pair of horses in a buggy would complete the journey in the same time. It was impossible to unload the sheep and feed them at any of the stations where they were detained for any length of time, and the result was that they arrived in a wretchedly starved condition, from which it will take them some time to recover. In order to remedy this, I may say, cruel treatment I would suggest that the Railway Department make and supply a special type of sheep van for the use of stud sheep, which can be attached to fast mail trains. The Railway Department has, at no doubt a very large expenditure, provided for racehorses a special type of comfortable van that can be attached to fast mail trains. These animals, or I might say 99 per cent. of them, only provide a sport which is sometimes of a doubtful nature. They do not form our premier industry—far from it—and yet they have the most rapid and comfortable transit. They get every consideration, and yet the animals that form part of the greatest assets that Australia has are subjected to the most inhuman treatment.

I am not by any means opposed to racing. I am a half-owner of several horses that are racing or in training at the present time, but I am opposed to their getting better and more comfortable treatment than stud sheep. We could do without racehorses. Their greatest use is only to improve the breed of our horses. Without our stud sheep Australia would be in a sorry plight.—I am, Sir, &c.,

R. J. FAGAN.

Sunny Ridge, Mandurama, N.S.W., 10th May, 1921.

[This matter was dealt with by Mr. Fraser, Chief Railway Commissioner, in an address to the annual conference of the Graziers' Association of N.S.W., and reference to it will be found in our Record columns. It is also discussed in Editorial Notes.—Ed.]

Sheep's Health and the Blowfly.

To the Editor.

Sir,—I have read with interest letters from Messrs. Linton, Reid, and others on the blowfly question. Mr. Reid maintaining that a sheep to be attacked by the fly must have fever, which Mr. Linton ridicules, and gives reasons why such cannot be so.

As the blowfly trouble is with us to stay, and getting worse as time goes on, I think it is up to those interested to give their views on the subject, and so probably help to arrive at some solution to the trouble.

Personally I consider nearly all sheep fly-struck have some flaw constitutionally, showing itself in the blood, urine, yolk, or other secretions. If such were not the case, how is it all sheep are not struck? It cannot be because the flies won't go round.

Catch a sheep not struck when the flies are bad, and probably a third of its mates are struck, and investigate closely at the crutch or pizzle, and see if there is not sufficient moisture and inducement to attract a fly. Why is this sheep not struck?

Why will a sheep get struck on the back, side, or neck, where apparently there is no inducement?

I have seen sheep pulled out of a bog where it had been for hours, and still not struck, though the flies were fairly numerous. On the other hand, I have seen a sheep tied up for only a few minutes, and in that short time struck.

Why, when a sheep struck early in a fly season recovers, does it not get struck continually till it dies—which would not be long? Surely this sheep has a greater attraction for a fly than a sheep simply moist from urine, &c.

We are now having the pleasures of a blowfly visit, but a

big percentage of the sheep struck get over it, apparently on the first strike. I have never seen it more pronounced. Why is this? There are plenty of flies.

I say it is not by a long shot that the most urine-stained or likely-looking sheep get fly-struck first.

Mr. Linton mentions that Mr. Reid admits having seen jute struck or blown. I presume maggots in such cases did not mature. Mr. Linton, I presume, has seen hundreds of instances where sheep have been blown, and no maggots follow. This can be seen any time out here when the fly visit is on.

Any person to say the flies do not come in waves cannot have had much experience of the trouble.

My contention is, a maggoty sheep gets better in the midst of a fly season because the weak point in its constitution has been remedied, and so young maggots won't thrive, and when a sheep is struck where apparently there is no reason, it is because there is a weak spot there, caused as above suggested, and to remedy which to a big extent it seems to me possible that something in the form of a lick could be made, and which could be placed in camps, &c.

Spraying no doubt is the best remedy so far discovered, but it is only the best of a bad lot, and is a pretty big job on a place carrying big numbers of ewes, costly, and a thing that must be done thoroughly or better left alone.

It would be interesting to hear reasons why a good fall of rain during a bad fly attack invariably brings relief. Assuming it kills the fly—which I very much question—what about the pupae? I have proved the fly develops from the pupae even faster on wet ground than on dry.

I am at a loss to know in what form does the fly lie dormant for long periods. In a fly season the pupae can be seen in hundreds under any carcase a couple of weeks old, but it is not the case always.—I am, Sir, &c.,

E. C. C. LUCK.

Portland Downs, Queensland, 15th May, 1921.

Poisoning Blowflies.

To the Editor.

Sir,—I have had satisfactory results in poisoning flies as follows:—

(a) Split a petrol tin lengthways, and put a piece of meat or sheep's head in it, soaked in arsenic water, and leave about half an inch of arsenic water in the tin.

(b) Split a dead lamb down the ribs, put a clod under his head and tail, and then pour about half a pint of arsenic water in him, and set a 2-oz. tobacco tin of arsenic water alongside as well.

(c) Pour two or three pints of arsenic water over all dead sheep, which will kill every maggot and many flies.

(d) One lb. of arsenic to 5 gallons of water and no soda is what we use.

Trusting this may be of use to your readers.—I am, Sir, &c.,

S. WILSON.

Lake Cowal, Marsdens, N.S.W., 23rd May, 1921.

New States.

To the Editor.

Sir,—I was much pleased to note in your May issue of "The Pastoral Review" a very able letter and map by Mr. Abbott on the above subject. The subdivisions proposed for New South Wales are, in my opinion, most suitable. For many reasons it is desirable to reduce the size of the existing States, and it is to be hoped that with the amendment of the Constitution, electoral franchise will have attention, as suggested by ex-Senator J. T. Walker, giving more power to the experienced elector in choosing those who are to govern. No doubt there will be great opposition from professional politicians and interested metropolitans, also many matters for adjustment, but as in America they can be overcome. It is to be hoped that the movement for subdivision now started will be warmly supported by all those

who are desirous for the salvation of Australia.—I am, Sir, &c.,

TARBURTON BOSSLEY.

Willoh, Brewarrina, N.S.W., 6th June, 1921.

P.S.—I am pleased to note Mr. Abbott favours the locking of the Darling; it is a project which I have advocated for many years.—T.B.

Warts on Cattle.

To the Editor.

Sir,—As your correspondent "Selector" in the last number of your Review seeks advice re the treatment of warts on cattle, I gladly give the result of my experience in treating same.

The cause of warts on cattle is, so far as I can learn, unknown, but can be cured by the following method, except perhaps when the skin is completely covered:—

Simply cut off as much of the warts as possible, consistent with safety, in proportion to the extent of infection, and dip the beast. The cure is really effected by the dipping fluid getting into the roots while they are freshly cut, and the sooner the beast is dipped after the warts are cut the better.

If only a small patch or patches, all can be cut, but when half the skin is covered with warts it is too severe to cut all the warts off at one operation; but it can then be done in sections, and with ordinary common sense directing the work, it will be found effective in its results and humane in its progress towards success.—I am, Sir, &c.,

WILLIAM BEAK.

The Meadows, Rockhampton, Q., 3rd June, 1921.

To the Editor.

Sir,—In answer to "Selector's" inquiry re a cure for warts on cattle, I have been most successful in curing them, and also ringworm, with crude vaseline (petroleum jelly) rubbed on two or three times a week. It is dark brown in colour; the more refined stuff is not so good.—I am, Sir, &c.,

E. R. KINLESIDE.

Uppingham, Koorawatha, N.S.W., 1st June, 1921.

Footrot in Sheep.

To the Editor.

Sir,—In reply to the question in Mr. C. A. Gibson's letter in your April issue, the 200 odd sheep I mentioned had been grazing in wetish flax swamp country. None of their feet that I examined had reached the maggot stage. Most of those examined were badly scalded, swollen with inflammation, and in several cases pus was exuding at the junction of the hoofhorn and hair.—I am, Sir, &c.,

H. J. T. HUME.

Tokomaru, Manawatu, N.Z., 24th May, 1921.

Graziers and the N.S.W. Railways.

At the annual conference of the Graziers' Association of N.S.W. last month, Mr. James Fraser, Chief Railway Commissioner, delivered an address on numerous matters of interest to the pastoral industry in connection with the railways. As the address was lengthy we can only give an outline of it here.

Referring to a deputation that had recently waited on him from the Graziers' Association and kindred bodies with a request that there might be some reduction of rates for the carriage of live stock owing to the great depreciation in values which had taken place during the last few months, Mr. Fraser said that he had not been able to accede to this request owing to the railways' own vastly increased expenditure, and a deficit still to be faced.

"There is another aspect," he said, "and I think it is one that I can rightly place before you, and that is that the position in New South Wales is more favourable in respect of the charges that are imposed on rail-borne production or for the carriage of passengers than in almost any part of the world, excepting Japan and China; in those two countries wages, as you know, are, well, negligible—about one seventh or one eighth of what we pay in

New South Wales, but there is no country in the world that pays the same wage as we do in New South Wales and carries a passenger a mile and a ton of goods a mile at the same rates as apply in New South Wales. We pay as a matter of fact the highest wages in the world to railway employees, except in the United States of America, and in the United States of America, although they charge a lower rate to carry a ton of goods a mile, they charge nearly two and a-half times as much to carry a passenger a mile as we do. If we had here in this State the same passenger rate as that which rules in the United States we could carry your merchandise at a lower rate than they carry it in the United States of America, and we could carry it at a lower rate than we have ever carried it at any time in our history.

"There is another comparison I would like to make with the United States of America, and it is an important comparison, too. We have been told here in New South Wales we ought to be able to carry a ton of goods just as cheaply as they carry it in America. We cannot, and we will never be able to do it while our conditions remain as they are at present. America has the longest haul in the world, which makes for charges lower than those which rule in any other part of the world except Japan and China, where they are able to haul their goods at extremely low rates on account of the fact of their extremely low wages, but the long average haul in America gives them an enormous advantage, and another advantage which America has, and one which must not be lost sight of, is the enormous business per mile of track which is done."

Mr. Fraser referred to certain requests for concessions in other directions, one being the provision of suitable waggons for the carriage of stud stock and attaching same to mail trains. This will be found to be dealt with in our editorial columns. Coming to the question of the construction of cattle waggons and sheep vans, the Commissioner said:—

"We have got 100 four-wheeled waggons (cattle) under construction at the present time, and I think at the present moment that that addition to our stock will fully meet requirements. To-day our position with regard to live stock waggons is this: We have practically 700 or 800 sheep vans not called for, and we have about 150 cattle waggons not called for. Your business has dropped away, as you know, and the waggons which we have in service to-day fully meet the requirements of to-day. One hopes your business will increase; as it increases I hope we will be in a position to meet that increase. We have had difficulties in the recent past with regard to cattle waggons; we are increasing our stock of cattle waggons; when we see indications of an increase in your business we will make further increases still."

In regard to the carriage of store stock, Mr. Fraser said they had had many requests. "It was never," he said, "the intention of any administration that the store stock rate should be taken advantage of for trading purposes—that is, for buying and selling purposes. If the concession be given as you desire it, there is little doubt that the concession rate would be taken advantage of for buying and selling purposes. I think that the store stock rate and the store stock conditions are as a matter of fact reasonable, because if you desire to sell stock which are in store condition, stock which are in that condition are lighter than fat stock, and you can get more of them into a truck, and by that fact alone you get a considerable advantage. You may be able to get into a sheep van 10 per cent. more sheep in store condition than would be the case with sheep in a fat condition; you would get a 10 per cent. advantage in that direction. . . . I, with my colleagues, am quite prepared to give this matter further and fuller consideration to see whether we can modify our conditions in some way that will make them more satisfactory to you, but at the same time I want to make it quite clear that we must safeguard our revenue and get that revenue to which we believe we are entitled."

The Commissioner offered to send to any country centre a responsible officer of his department to discuss with producers and others any grievance or request relating to railway matters with a view to a mutually satisfactory settlement.

The conference passed a resolution expressing its great appreciation of the treatment accorded by the Commissioners to graziers through the recent drought period for the carriage of live stock and fodder.

At the annual meeting of the South African Farmers' Co-operative Meat Industries Limited, held at Maritzburg on 29th April, accounts presented disclose a net profit of £2947 for the past year. Shipments of frozen meat made during the year include two full cargoes of beef, one of which went to France. The company owns works at Maritzburg and Harrismith, with large stores at Concella, Durban. Works are in course of construction at Klerksdorp and East London.

Motor Notes.

BY "GNOME."

As these notes are being written we are "tied-up" inside a dry dock undergoing a keel hauling. Outside it is fairly pelting with rain, and with it is a bitterly cold southerly wind. In fact it is many a long day since one experienced such cold, and as a consequence we are all suffering from a nasty form of influenza cold, which is hardly bad enough to put a man to bed, but if there were not a huge volume of work to be gone through, my bunk would occupy my attention for a day or two, and these notes would in all probability go by the board! So if this month they are below par I sincerely trust that you will be kind enough to excuse a poor effort.

Well, during the last month or two we have been battering the hammer and chisel kings up against the ropes a little bit, though one very much doubts if much good can come of it until proper legislation is brought into force. However, the following may be of some little assistance to you in the overcoming of small engine difficulties. There are not many motorists these days—especially "youse blokes" on the land—who are contented to sit back and leave everything to the paid man, more so now that the financial world is so stringent. Most men in the country one finds like to have a go at the 'bus when time permits, but one of the greatest mistakes that the majority of amateurs make is that they are inclined to go about things in a bull-at-a-gate fashion, and throw common sense and judgment to the winds.

As you are already aware, the overhauling of a car at a garage or a big motor works in these times is an expensive matter, and in my own humble opinion one of the principal reasons for its costliness lies in the fact that a very considerable portion of the total time spent on the car is actually occupied over work which, while certainly calling forth some common sense and skill in the use of a few tools, does not really demand the technical knowledge of a fully trained mechanic. Take for instance the pulling down, cleaning, reassembling, and the adjusting of such gadgets as steering connections, brake mechanism, wheels, valves, cone clutches, water pumps, down to the removal from the chassis of the body. All these simple jobs are done by men who to-day are drawing salaries out of all proportion to the "elbow-grease" that is exerted. Such a fact must naturally have caused you to think over the possibility of overhauling your car in your own little garage. Of course I am considering the man who is really keen on his car and can find the time to do a good deal of work in the intervals, and is not pressed for the use of the vehicle. For the absolute novice who has little love for the mechanical gadgets to attempt an overhaul would be veritable suicide—or should one call it car murder? In any case such a man should far rather pay the piper than attempt the job, as he would be lacking in the necessary confidence that is so essential. At the same time the mechanically-inclined amateur must proceed with all precaution, being careful not to undertake delicate work which he has not beforehand felt assured of being competent to perform.

Before the owner-mechanic arrives at any definite conclusion with regard to the practicability of his being able to perform the job successfully, there are three main questions that he must first of all consider. First and foremost, "Do you possess enough mechanical ability?" There are many men that think they know quite sufficient to do anything with a car, but if you asked them how they would carry out a simple little job like the timing of the magneto they could not tell you. In the second place, "Is the garage used by you of sufficient size?" And thirdly, "Have you sufficient time to carry out the work without scamping it?" All this is of vital importance, especially the third term, because when a man is actually on the job he must devote his attention to it, even if it be for only a couple of hours

per diem. No scamping must be indulged in. It would be better to leave that to "Captain Kidd," as a lot of energy would be thus saved.

Speaking generally upon a point that has already been touched upon, permit me to impress upon you that no one should undertake an overhaul unless he be thoroughly familiar not only with the broad principles of the internal combustion engine, but also of the mechanical details of his own particular car. And once more I strongly advise him never to attempt what one may call advanced mechanical work unless he has already had some previous workshop experience, as can be gained from a technical college or university training. Summing the whole thing up in a nutshell, I may say that if a man has enough confidence in himself to start on such a job, he will probably have sufficient knowledge to carry it out. This factor, plus the prospect of spending many hours in old clothes and in a sea of grease and dirt, leads me to assume that he has the necessary stomach to go through with it, and eventually win out. Before launching out on the scheme, though, "search" yourself and make sure that you are not one of those happy individuals who goes into a thing full of punch, and when half through wishes that the thing had never been touched, by this time feeling thoroughly fed up with the job. Let me warn you against this, as more than one amateur has fallen in the same way, through, of course, being built more or less along lines of the "spasmodic enthusiast." But if you do make the attempt, take it for granted that mistakes may, and probably will, be made, and that the mechanics round about your little spot most certainly will inwardly splutter, but after all the car belongs to you, and when the whole circus is finished there will be considerable comfort in the thought that you have gained much valuable knowledge by your acquaintance with the bus, and probably saved a considerable sum of money at the same time.

Now returning to the question, "that of sufficient space to do the work?" This is easier answered than the first question, though the personal factor once more has to be taken into consideration. For myself, I am a great stickler for plenty of room. The standard allowance for a garage wherein one car is to be overhauled is about three times the space that the car occupies, but of course if there is a chance of securing larger room, so much the better. Again a good light is most essential; "plenty of light and ample room" is my motto, both of which tend towards giving speed and comfort in carrying out the work. Do not think for a minute that the job cannot be carried out under unfavourable conditions, as many a time I have had to do an overhaul in an old barn or a tumble-down tin shed, but there is nothing like comfort when doing a job of this nature, and a great asset in this direction is a good, hard, clean floor. Referring once more to the space that is necessary one must not forget that the bench and vice take up quite a little room apart from the space that is required to move round about this necessity. To be cramped for room on the bench is one of the greatest time losers to be found in the ordinary workshop, as the mechanic spends half his time looking for gadgets that have been tossed into a box under the bench, and which should really be laid out in such an order that they can be picked up at the merest glance. Plenty of bench room also lends itself to cleanliness, which is one of the governing factors, and one that is very often neglected by the mechanic from a personal viewpoint, let alone from that of the poor internal combustion engine!

The next subject to occupy our attention is the tools that are necessary to carry out such a job. The average mechanic generally carries far more tools than are generally necessary for the job that he is working on. One man known to me who is exceptionally clever does not carry much more than about a dozen tools, which generally comprise four double-ended spanners, one large and one small shifting wrench, four tube spanners, one medium-sized screwdriver, and a pair of medium-sized pliers. Of course if it comes to a soldering job and that sort of thing, then he provides himself with the necessary gear. But he goes out armed according to the type of car upon which he is to work. But it is generally a fact that the man who goes out on a job

with a big kit of tools is inclined to be a "botcher," because he cannot do without them in the same manner as the man just mentioned, and then it is a penny to a peanut that he has forgotten one of the most important gadgets in the outfit.

But if a man was really well provided with a thoroughly up-to-date tool kit when he purchased the vehicle he would find that the tools required for the job in hand would be probably more than adequate after a few additional "geezas" had been bought, that would be kept in the garage, and not carried about in the back of the car.

The following is a list of tools that would be carried by me if I were as keen as are some of my readers if their letters to me are any criterion. In making out this list it has been my aim to avoid as much as possible putting in gadgets that would be seldom used. Even in the ordinary tool kits that are supplied with the car to-day you will find some kind of contrivance that you have no idea what it is meant for. Just useless weight. Well, to be up to date, let us start off with the hammer and chisel! These can at times be useful, but must be used with discretion. And so we will have:—

8-oz. hammer, 1½-lb. hammer, ⅜-in. cold chisel, ½-in. cold chisel, ⅜-in. solid punch with 3-32-in. point, ⅜-in. solid punch with 3-16 point, ⅜-in. solid punch with ¼-in. point, ⅜-in. centre punch, 4½-in. warding file with handle, 8-in. square file with handle, 7-in. flat file with handle, 7-in. round file with handle, 5-in. square shank screwdriver, machinist's all-steel heavy screwdriver, 6-in. off-set screwdriver, 3-in. electrician's screwdriver, 6-in. adjustable combination pliers, ⅜-in. pair of pliers, King Dick small shifting wrench, pair medium tin snips, large auto-shifting wrench, 10-in. Stillson wrench, complete set of double-ended set spanners, complete set of tube spanners, blow lamp, ½-lb. soldering iron with handle, bundle of solder, bundle of No. 15 copper wire, bundle of No. 20 copper wire, tin of fluxite, box of assorted split pins, box of assorted nuts and bolts, roll of insulation tape, box of assorted copper-asbestos washers, sheet of Klingerite joint packing, bottle of shellac, grease gun, box of assorted spring washers.

Well, that's that. If I had the ready cash there are one or two additions that I would be inclined to make to that list which can be done without, but they make the work ever so much more enjoyable. For instance, take the Walden socket wrenches, which are made in sets for various types of car, and are accurately manufactured. They are great and save a lot of trouble. Added to this list would be a good heavy garage jack, which can be easily pulled along the floor without too much stooping. If there is electricity laid on at the house then an electric portable lamp will be found extremely handy.

Well that should be enough to go on with, and by the time these are collected my cold should be once more O.K., and ready to commence the job next month. Cheerio!

United States Tariff.

It is announced that President Harding signed the Emergency Tariff Bill the end of last month, and that the measure became effective as from 28th May. The duties thereby imposed of most interest to Australia and New Zealand are:—Wool, greasy, 7½d. per lb.; wool, washed, 15d. per lb.; wool, scoured, 22½d. per lb.; wheat, 17½d. per bushel; wheat flour, 20 per cent. ad valorem; beef, mutton, lamb, and pork, fresh or frozen, 1d. per lb.; prepared or preserved meats, 25 per cent. ad valorem; butter, 3d. per lb.; cheese, 23 per cent. ad valorem; apples, 15d. a bushel.

Included in the bill is an anti-dumping clause, which, according to information received by the American Trade Commissioner, Mr. A. W. Ferrin, provides for a special duty on articles imported at a price less than the value in the country of origin, or less than the cost of production. The special duty, which is to be in addition to the specified duty, is to be equal to the difference between that value or cost and the price at which it has been sold for export to America.

Literary Supplement.

Sporting Notes.

BY "FIFE AND DRUM."

School Boat Races at Geelong.

For the first time in my sporting, strange, eventful history, I saw the Head of the River race upon the Barwon this year. It seems a long while ago, and many things have happened since then, but we watched the affair under such beautifully favourable circumstances that I must really tell you a little about it. Most of the Melbourne spectators travelled to Geelong by road. We went by rail, which is a much better plan, having the motor to meet us at the end of the journey. We expected an enormous crowd aboard the train, but you could write your own ticket for a seat, and one special after another was cancelled, so that ultimately the journey was made in perfect comfort and in pleasant company. And what a crowd was there! I scarcely think that any one habitual visitor to the Head of the River race on the Yarra was absent to-day at Geelong. And, of course, all the boys from every school were in evidence, with their identifying caps and their shrill cries. Nothing could have been jollier in the way of weather, and it was tremendously enjoyable.

The first heat, Melbourne against Geelong College, we witnessed from close to the winning post, but on the upper side of the bridge. Our sympathies were with the College, but from the moment that the gun fired, and we could catch the flash of the water from the racing oars, it was quite apparent that there was only one in it. Melbourne out-weighted and out-paced their adversaries, and, rowing in capital form, won easily. Everyone, I think, will be glad when the College gathers together a crew strong enough and weighty enough to score a gallant victory in the finals. The grit and the courage are all there. The size will one day be present, and everything else will then be added to them.

And now, for the second heat, we did a most unorthodox thing. We climbed, on wheels, that steep ascent above the river's brink until we had surmounted the high hill known as "The Look-out," and whence, as from an aeroplane, we could see with our glasses the entire course, with perhaps the exception of the last 200 yards. We are too far away to hear the gun fire, but we can see the oars take the water, and we can swear that Wesley are more powerful than Xavier, and although, from this great height, the boats themselves seem like tiny crawling insects on the river's breast, and not even the shouts from the crowd reach our ears, we know that Wesley has won.

Then, to insure us against the slightest suspicion of monotony, we watched the start for the third heat. Have you ever been up to the start? It is well worth seeing, and I felt my own heart beat, as some of the boys were feeling theirs, as they waited for the report of the gun that sent them on their way. Scotch are a splendid crew, an unusually fine lot of oarsmen, tall, yet stout, lithe, muscular, in rare health, well schooled and trained. Geelong Grammar are all right, too, but there is a something, a je ne sais quoi, about the Scotchmen that makes you curiously confident of the result. Each boat is manoeuvred until the attendant at the stakes can hold the stern, and then comes from the starter, "I shall say, 'half-forward! Are you ready? And if I get no response, I shall fire the gun.'" Each coxswain waves his hand in reply. "Half-forward! Are you ready?" Bang! Scotch strike the water beautifully together. There is no hurry, no splashing. The time is perfect. They catch hold like one man, and get the full power of all their united strength and weight until the oars again leave the water. I do not know the slang of the game, but you know

what I mean. Geelong are flustered from the jump. They are as game as pebbles, keen as hawks; but superior form, better style, must inevitably tell their tale, and the light blue caps have to take a seat behind until once more we watch for them rounding the bend beside the Temple of the Winds on Yarra banks next year.

Racing.

We have had any quantity of racing since last month, and some of it very enjoyable indeed. I don't think I ever liked Moonee Valley so much as on Commonwealth Steeplechase afternoon. It was such a perfect day. A warm sun, no wind, the sky blue, with white cirrus clouds thousands of feet high, and the sward as green as emerald. The city is rapidly enveloping the little course within its spreading tentacles. As we sat on one of the many seats provided at this beautifully managed course, I heard those of the passing generation talking of the good old times, before the great town had commenced to push out in real earnest. Across the valley and beyond the creek, where there are still the remnants of what were once green fields, stood the house of Basil Grey, so well known in the hunting field, where eventually he met his death. I do not suppose he would have asked for a better passing to the great beyond. Not far removed was the house of Dawson, whose name, I think, still lingers in a certain corner where traffic most does congregate. But I am not sure of this. Some reader who loves the olden times might give us the benefit of his knowledge, and descant. Farther north there is another old-time house raising its head from out a crowd of modern dwelling places clustering around, but I did not hear to whom it belonged in the old days. That strip of grass, which was once portion of a large paddock leased by a city butcher, was used by the late W. E. Dakin as a training ground for his numerous string when not attending the stereotyped training tracks beneath Flemington hill. And across those streets, when yet the builder and his men were far absent, and when the grass still grew, the hounds, time and again, finished their drag hunt, and the field repaired to Mr. Basil Grey's for light refreshment, and then came wending their way across the creek to take part in an afternoon's racing at the Valley. When the last patch of greensward has disappeared, and when red roofs and brick buildings have devoured all that is within reach of our eyesight from the grand stand, remember this as you sit there, and perhaps you will sigh for the days that are no more.

However, to return to our racing, we were saying that the Commonwealth Steeplechase Meeting was a very enjoyable one. It is always an important gathering, marking as it does the commencement of the steeplechase season, when "class" begins to be well represented again over the sticks.

Neat little Oriens, very well and full of muscle, and thoroughly schooled, made an example of a pretty good field in the Federal Hurdle race. Gereldery, a good-looking horse, who ought to have started favourite, and actually was favourite, refused to start at all, and evidently he has become a victim to an evil spirit. You have often seen most of the competitors before, and I need scarcely recall them to your memory, but in a Grand National Hurdle race connection I would draw your attention to Kilowat, a New Zealand bred gelding, which led for a considerable portion of the journey, and finished a fair second. This horse has plenty of pace, stays well, and ran fourth for the Australian Hurdle Race last year. He has a distinct chance for the big race next month, and he is getting over his fences now in quite orthodox style. Another prominent aspirant to run at the Valley was Gold Coin. This is a very impressive cut of a horse indeed, and he had ample pace to win good races on the flat over in the West. He was treading delicately to-day, and his name was not returned with a price in the market. But in one short week he was fully commissioned at headquarters, starting first favourite, and, taking the lead half a mile from home, he won very handsomely indeed. At the present moment he and Kilowat are my pet fancies for the National.

You positively must have breeding in your hurdle and steeplechase horses nowadays, and Gold Coin fills the bill so far as that is concerned. He is by Poseidon, who, you recollect, sired Old Mungindi, the gallant winner of a very good

Grand National, and he is out of Miss Florence, by Lochiel from Helene, who belongs to the well-known Scandal family. It is the Bruce Lowe No. 8. If he remains sound, I prophesy with trumpet tongue that he will make a champion steeple-chaser.

The Commonwealth Steeplechase was a pretty race, and the company was good. Trevanyan was most fancied, but he ran very badly indeed. I don't like him. He seems to me to be a lazy horse with a somewhat small eye, which spells roguery. He never took a firm hold of his bit at Moonee Valley, began clouting them heavily before he had covered any distance of ground, and finally, risking it once too often, went heels over head. He is by Tom Moore from Cushla. But I cannot identify this Cushla with the Lochiel mare of that name, as the stud book does not credit her with a service from Tom Moore. But I may be wrong. The race was won by a rarely bred nine-year-old gelding, Adolph, belonging to Mr. A. L. McCracken. The victory was a popular one. Adolph is by Bardolph out of Camooweal, by Simmer from Oran, by Goldsbrough out of Welcome Queenie, by Welcome Jack, her dam Queensberry, by Hawthornden out of Algeria, by Blinkhoolie. You can't very much improve upon this, and the style in which the horse won suggested much greater things for the future. He took his fences very safely, and fairly fast, and if he learns Flemington in time he may very well take his place in the list of National winners. That would be very satisfactory. The consistent chestnut Wooloo was a good second to Adolph, and he another good bred one. He is by Pendil, who was a rattling good racehorse, out of Maisie, by Lonsdale out of Athata, by Trident from Nellie, by Tim Whiffler out of our very old and revered friend Sappho. For old sake's sake I should like to see this horse win the big steeple, and he has a rare good chance.

King's Birthday at Flemington was interesting on account of the jumping division that appeared there, and the weather was again all that you could ask or think for winter time. I must say that I do love Flemington in June. The great wood of elms, beneath which the bookmakers ply their trade, are so thoroughly wintry in their leafless state, every twig standing clear traced against the watery blue of the sky as though etched by a cunning hand, that you can almost think yourself at home, away there in the biting north. I walked round the course before the racing commenced, in spite of the perfectly polite and good-humoured attention of numerous well-mounted policemen, and I never saw the racing track in such beautiful order for galloping. Soft, without being in any way rotten, sound indeed as a bell, level as a lawn, and with the grass cut to just the right height. After you have been round the "down the line places," and examined their jumps, you realise that horses have to jump at Flemington. Sandown, by the bye, is very good also, but the leaps there are of quite a different character from those met with down by the Saltwater River.

We opened with the York Hurdle Race, and, as we have related above, Gold Coin won decisively. Two Blues, who knows all the blades of grass on Flemington, although he is an inhabitant of the tight little island, after toiling heavily in the rear for the greater part of the journey, suddenly woke up, or perhaps threw off the soreness which was hampering him, and, travelling at a great pace, was catching his leader hand over fist as the post was passed. Haoma, a captivating little Persian Knight gelding from South Australia, also ran a good race, finishing third, and each of the placed horses must be given a chance in the great race next month. I like Haoma. I wish I owned him, and had a boy who could hunt him in Leicestershire, riding about ten stone. He won in a canter on the second day, but his rider was as nearly caught napping as anything I ever saw. Spain, the rider of Bill Bluster, took in the situation at a glance, rode his horse for his very life, and in one more stride would have had his head in front. What a dust would have been kicked up by the crowd if things had gone wrong! Youghal, the little Aurum gelding who ran so well last year, and has won since, was a good fourth, and he, too, is not out of the National.

The Hopetoun Steeplechase brought out several prominent candidates for next month's event. Iolaus, who won so brilliantly last year, was at once made a raging hot favourite,

unmindful of his substantial twelve stone three. There is a vast difference between nine thirteen and twelve three, gentlemen. Besides the horse was big and above himself. He looked much too well for my fancy. Mountain God was just about as he ought to have been at this period of his preparation, but Yarram Lea was a shade light, I thought. Gallant little Bunroy made the pace a cracker, and at the first hedge after leaving the straight he had winded the portly Iolaus, who hit. Away at the far end of the course Bunroy still held a good lead, and looked a most likely winner, when he, too, struck hard, and lost a lot of ground. Iolaus meanwhile was out of it, but Yarram Lea was galloping and jumping smoothly and well, and Bunroy was not done with. Mountain God was coming with a wet sail, and it was a race from the last fence. On the flat Mountain God had too much speed for the opposition, and he won, all out, by a length and a-half, with only a neck between Bunroy and Yarram Lea, and Iolaus some lengths behind.

The Steeplechase on the second day brought out a further contingent of National horses, and it was an interesting race, somewhat marred by several spills. Berribee is a slashing gelding, and I, for one, thought that he could scarcely be beaten, bar accident. Monrose is a sweet gelding, and is half-brother to the ancient Cobram. Rayberry is a good-looking fellow, but he was dragging his near hind toe as he walked round the enclosure, and I did not like it. An old friend in Lumut was well, and we know he can get the course, and Wooloo we had seen at the Valley. Yarram Lea was bright, but, of course, no stouter than on Saturday, and Gazomp, whose maiden effort it was over Flemington, made up the field. The race was run over two miles and a-half. Monrose apparently never saw the first fence. He crashed into it, and measured his length, luckily without injury either to himself or Connolly. But it looked a bad fall. Berribee shot out at a great pace, and before the straight was reached the first time round had a long lead. Here Rayberry, who was tailed off, anchored on a fence, while Yarram Lea, Wooloo, and Lumut closed up the gulf that divided them from Berribee. At the hedge along the river Berribee made a bad mistake, and he struck the next as well. He had now dropped back to third. Gazomp was down—at least his rider was. At the sheds Berribee commenced to go up to his field again, when over he went, and Yarram Lea led the survivors round the turn and into the straight. But Wooloo has too much pace and breeding on the flat for horses like Yarram Lea and Lumut, and, drawing past them, he won, but with not a great deal to spare, by a length and a-half. Berribee was remounted, and finished some distance behind.

And now that these preliminaries are disposed of I shall, for a wager of a penny (Scots, not sterling) back my placings in the Hurdle and Steeple against yours:—

HURDLE RACE.

Gold Coin.
Kilowat.
Percolator.

STEEPLECHASE.

Doiran.
Berribee.
Wooloo.

But I confess myself the very worst tipster in the world.

Hunting.

A moment only for hunting this month. The season has opened auspiciously for the Melbourne Hounds, although there has not yet been enough moisture to assist scent, and render jumping quite comfortable. But there was a splendid turn out at Clyde for the opening meet, and a field of over a hundred followed Mr. A. T. Creswick and Mr. Norman Wood over the railway bridge to draw the first cover. I was glad to see that there was quite an encouraging influx of young men in the ranks, and there was the usual bevy of lady enthusiasts, with some additions to their ranks, of former years. Bravo, ladies! If the spirit of the chase once again takes possession of the breasts of the golden youth of the place, it is you that we will have to thank for it. So long as your fair forms fleet forward in the van, so long will it be a case of desperandum nil. Where you go there ultimately must the young men follow, if their manhood still remains. They had a smart run to-day, and I never saw them leave Clyde so smartly as they slipped over the road double and made away due north. Hounds ran and hunted well, although

they may be still a little short of work, and after quite a decent run they ran into him and killed. There were numbers of foxes afoot, and although they chopped another fox, the scent seemed to fail altogether in the afternoon, which was perhaps just as well for the sake of horses, hounds, and field.

Blood Sires.

BY "FIFE AND DRUM."

Pyrrhus the First.

Just every now and then it is profitable to leave the sires of to-day, and to turn, when opportunity serves, to inspect some available portrait of one of the mighty dead. I wish more of such pictures could be hunted up for our benefit. But here is one for us this month. It is a photograph of the oil painting, by J. F. Herring, of Pyrrhus the First. Major Alan Currie, in whose possession, at Ercildoune, the picture is, kindly had the photograph executed, and sent a copy on to me. Pyrrhus the First was a chestnut horse, foaled in 1843. His principal performances were:—Won the Newmarket Stakes as a three-year-old, after a tremendous struggle with Iago. In this race the horsemanship of Sam Day and Frank Butler was a treat to witness. Iago was a good horse, winning several races, amongst them being the Grand Duke Michael Stakes, in which he defeated the Leger winner, Sir Tatton Sykes. Pyrrhus then won the Derby, but he only got home by a neck from Sir Tatton Sykes, who was left at the post, and upon whom Bill Scott lingered, after flag fall, to curse the starter. Poor Bill was a little "the wuss" that afternoon. Subsequently Pyrrhus succeeded in winning several Queen's Plates, all of which were run for over a two mile course. The horse is of considerable interest to us in Australia, as having sired Snowden and New Warrior, both of which stallions were noteworthy in their day, although they have left us nothing in tail male to carry on the fortunes of their houses.

I think you will appreciate the reason for this failure if you study the pedigrees of Snowden and New Warrior, in

PYRRHUS THE FIRST, ch., 1843.	Epirus (13)	Langar (6)	Selim (2)	Buzzard (3)	Woodpecker (1)
			Dam	Misfortune	Alexander (13)
		Dau. of Highflyer	Dam	Walton (7)	Sir Peter (3)
			Young Giantess	Arethusa	Diomed (6)
	Olympia	Sir Oliver (13)	Sir Peter (3)	Highflyer (13)	Giantess
			Fanny	Papillon	Diomed (6)
		Scotilla	Anvil (9)	Ambrosia	Herod (26)
			Scota	Dau. of Feather	Eclipse (12)
	Fortress (3)	Defence (5)	Waxy (18)	Harmony	Pot-8-os (38)
			Penelope	Maria	Trumpator (14)
		Defiance	Rubens (2)	Prunella	Buzzard (3)
			Little Folly	Dam by Alexander	Highland Fling (12)
Jewess	Moses (5)	Whalebone or Seymour (3)	Delphin (30)	Harriet	Bay Javelin
			Grey Skim	Hambletonian (1)	Dam by Precipitate
	Calendulae	Snowdrop	Camerton (5)	Highland Fling (12)	Daisy

conjunction with that of their sire Pyrrhus. There is a very decided absence of sire element in the latter, and the dams of both New Warrior and Snowden were equally weak in masculine strength. But please remark how sweetly Pyrrhus was in-bred to the two great brothers, Selim and Rubens. Conceit, by Pyrrhus the First from Vanity, by Camel from Vat, by Langar out of Wire, sister to Whalebone, was also imported to this country in 1864, and passed into the possession of Dr. Bathe, and subsequently into the stud of Sir Thomas Elder, but she left nothing behind her, with the exception of Irish King. You can see from the photograph that Pyrrhus was a good looking horse. He has plenty length of rein, and capital shoulders, even though they may be a trifle loaded at the point. His brisket is perhaps inclined to be "bullocky." He has great length, and from hip to hock, and from hip to the butt of the tail this is very noticeable. His gaskins are beautifully muscular, but his thighs are so well let down that the gaskins themselves appear to be preternaturally short. His saddle must have sat nicely back, and he girthed well. New Warrior left Australian Buck, Idle Boy, Pyrrhus, Tarragon, Teddington, Tim Whiffler, Volunteer, Warrior, and some lesser lights, but all, all have gone, those old familiar faces, nor do we see them reproduced by their children's children.

Snowden, too, has vanished, though doubtless, on the Murray somewhere, you will still catch sight of a grey horse with his rider gleaming, ghostlike, through the grey trees, and when you ask a question concerning his or her pedigree, the invariable answer will come in reply, "He was out of a Snowden or Mercury mare." And the name of Swiveller still appears now and then in the lines of a jumper.

Demosthenes (imp.).

Last month we had a fine picture of Magpie, from Mr. Percy Miller's stud. This week we have an equally good representation of another of Mr. Miller's stallions, the now-famous Demosthenes. This horse was a success from the very outset in New Zealand, and he will now have a grand chance up at Scone of proving himself one of the best descendants of St. Simon in Australia and New Zealand. What a massive, lengthy, handsome fellow he is, full of power in the right

places, manly, forceful, dominant. His stock keep on winning, and some of them are of the highest class. One has only to mention Amythas to give you an idea of what his sons can do. Afterglow, Delight, Karo, Crenides, Simonides, Silver Tongue, Demagogue, Fluency, and so on.

What buyers thought of the only yearling by him sold in Sydney this year was proclaimed in a loud voice when T. F. Scully gave seventeen hundred for the colt from Tete a Tete, the half sister to Bobrikoff and War Scare, the latter the dam of Estland and Finmark. The horse himself takes a good deal after his sire, Desmond, and he was by St. Simon out of the Oaks winner L'Abbesse de Jouarre. I should like to put mares of St. Simon descent to him. If I had an Amherst mare I should certainly try her here. He might possibly correct the shortness which was the fault of Amherst, and we would get a delightful piece of in-breeding. Demosthenes himself was a galloper, and won the Ashley Plate at Newmarket, and the Hyde Park Plate at Epsom, the Doncaster Spring Handicap, and the Epsom Stewards' Handicap, besides running into places in several very important events. He was quite a good one.

Ode to the British Flag.

Flag of Old England, batter'd and worn,
Guardian of nations, born, and unborn,
Emblem of Justice, Freedom, and Right,
Who shall traduce thee—question thy might?
Ages, on ages, witness thy fame,—
Standing for Honour—ever the same.

Flag of the Empire, trusted and true,
Beautiful Union—Red, White and Blue;
Floating with pride on mainland and sea;
Noble, and gallant, graceful, and free;
Honour'd, beloved, o'er the wide world:
Ne'er shall thy folds, thy Colours, be furl'd!

God of the righteous—ever thy stay—
He shall uphold thee—now, and for aye.
What though thy prestige they may assail,
Traitor, or foeman, ne'er shall prevail,
Who dares insult thee—sully thy name?
Hail! Flag of Britain—ever the same!
—"SEMPER IDEM."

12th May, 1921.

Curing Footrot 50 Years Ago.

The following is taken from the Sydney "Stock and Station Journal" of 15th February, 1895. It is a letter from Mr. George Merriman, Ravensworth, Yass, N.S.W., and describes his method of dealing with footrot:—

"In the year 1870 the footrot was very bad in the Yass district, and my sheep were no exception to the rule, about nine out of every ten being badly affected with the disease, and after trying every known cure for about two years, I succeeded in getting one, which cured all the sheep in this district at that time, and my sheep have never been affected with the footrot since. The cure is as follows:—Boil a quantity of water, then add a ½-lb. arsenic to every gallon of water; boil slowly for 20 to 30 minutes, keeping the water repeatedly stirred during that time. When the water is cool, pour it into a trough or place prepared for it, then commence to dress the flock, taking them as they come, sound and unsound, and examine every sheep before putting them through the water. If the foot is hot, it is a sign that it is diseased, and if so pare carefully and take all the decayed hoof off, for this is a very important part of the cure, and each sheep should remain in the trough after being dressed for at least five minutes, with sufficient water to cover its feet. Repeat the dressing one month after the first, and any sheep that are affected with the disease at second dressing should be separated from the sound ones, and remain so till they are cured. Wet weather is the best time to dress the feet, when the hoof is soft. I may state that I did not use any washing soda to dissolve the arsenic."

DEMOSTHENES, br., 1907.

Desmond, br. (16)	St. Simon (11)	Galopin (3)	{	Vedette (19)	(Voltigeur (2)
				Flying Duchess	(Mrs. Ridgway
		St. Angela		King Tom (3)	(man (3)
				Adeline	(The Flying Dutch-
	L'Abbesse de Jouarre	Trappist (1)		Hermit (5)	(Merope
				Bunch	(Harkaway (2)
		Festive		Carnival (14)	(Pocohontas
				Piercy	(Ion (4)
	Chittabob (20)	Robert the Devil (1)		Bertram (18)	(Litt'e Fairy
				Cast Off	(Newminster (8)
		Jenny Howlett		The Duke (12)	(Seclusion
				Constance	(Muscovite (2)
	Lauretta	Petrarch (10)		Promised Land (26)	(Diomedea
				Wanona	(Sweetmeat (21)
		Ambuscade		The Duke (12)	(Volatile
			Constance	(Atherstone (11)	
Carlin, ch., 1895 (5)	Ambuscade	Fair Agnes	(Fair Agnes		
		Lord Clifden (2)	(The Duke (12)		
	Laura	Promised Land (26)	(Constance		
		Wanona	(Beadsman (13)		
Carlin, ch., 1895 (5)	Ambuscade	The Duke (12)	(Madame Eglantine		
		Constance	(Warlock (9)		
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Agriculture.

Millet.

Given reasonable treatment several varieties of millet will provide very early and prolific summer feed in all except the coldest districts. The crop grows best on sandy or gravelly soils, but it will also give quite good results on fairly heavy land. No matter what the class of soil is it must be well worked. Aim to obtain the finest possible seed bed, lumpy and hollow land being bad. Deep ploughing is not advisable if the surface soil is shallow. Mr. Temple A. J. Smith, Chief Field Officer of the Victorian Agricultural Department, holds that one of the great secrets of success in growing all millets is to sow shallow, and when the ground is warm. Seed put down too deep or in cold earth will mould, and only a small proportion germinate. Usually one to one and a half inches is deep enough. The seed can be sown from September to January, and as the plant can stand drought but not frost, one must be careful not to put in too early. If broad-casted up to 15 lbs. an acre are necessary, while drilled, drills 7 inches apart, 8 to 10 lbs. is sufficient.

Undoubtedly the most popular variety is the Japanese millet. It comes early, and can be fed off in from four to six weeks after seeding; in fact, where intended for grazing purposes, it should be stocked when about 6 inches high, and fed down fairly close, which will tend to make it stool and become thicker. On irrigable land the stock should be taken off after the first feeding, and water applied. As soon as the land is sufficiently dry to carry a team, the paddock should then be harrowed with a set of sharp harrows across the drills, and the crop allowed to grow to a height of 6 to 10 inches, when the stock can again be put on. Treated in this way, it can be kept growing throughout the summer, and will carry, on an average, about ten to fifteen sheep per acre. The harrowing should be done at least three times during the season, and will be found to materially increase the growth of the crop. At intervals of a fortnight to three weeks, there should be a fine body of feed in each paddock. Three to four paddocks are necessary, for to keep the stock too long on one means less actual growth and the tramping out of the millet, whereas the intervals of rest restore the damage done in this way.

Where Japanese millet is cut and not grazed, it is perhaps better sown in drills 15 inches apart, and the scuffler worked between the rows until it is about 3 feet high. It should be cut well before the seeding stage about 3 inches from the ground. Cutting too close to the ground is liable to kill some of the plants. Cutting can be done three to four times in the season, and care should always be taken to wilt the millet for a few hours before feeding to stock, especially cows.

Yields of from 12 to 18 tons of green millet per acre are not uncommon, the crop growing in some cases 6 feet high. After the second cutting the crop can, if desired, be left to mature seed, which is readily saleable, and usually fetches a good price. Japanese millet can be cut for hay, and yields up to 3½ tons per acre. It must not, however, be allowed to go too far, as it will become woody and fibrous, and consequently indigestible. Cut just before the flowering stage, and it will be all right. As hay, it is not wise to feed to horses alone, as it affects urination in some animals; but, if mixed with oat hay, it is non-injurious, and gives the chaff a nice green colour. If cut with a binder see that the sheaves are small and loosely tied, so as to allow the feed to dry without becoming mildewed. Stook in rows and not too thickly.

Of the other varieties German, broom and Russian are amongst the best known. German millet gives a smaller yield and finer straw than Japanese. It is in this latter respect only that it is of superior value. The seed being small, it requires a very fine bed and shallow sowing. Rolling after sowing is desirable. It is usual to plant about 12 lbs. to the acre. It may be explained that German millet does not stool, a seed only growing a single stem.

Broom and Russian millets do best in the colder districts, and though of slightly inferior feeding quality to Japanese have a large carrying capacity. They may be fed off and kept grazed from the time they are a few inches high. However, one must be careful as they are liable to cause bloat if allowed to attain

to a height of 12 or more inches, and especially just before the flowering stage is reached. Stock grazed on the crops from the earliest stages of growth are apparently immune. When the seed matures the growth is safe to feed, and if cut green and wilted will do no harm.

Broom millet seed is a useful feed for stock. According to the Agricultural Notes published by the New South Wales Department of Agriculture, analysis shows that good quality seed has a feeding value equal to about four-fifths that of a similar weight of maize. Not only poultry, but horses, cattle, sheep and pigs find it palatable and digestible. On account of the small size of the grain and its hardness, it is advisable to grind or crush it before feeding, except for sheep and perhaps for poultry. The seed may be fed in the form of meal to farm horses, and in similar form to cattle—in the latter case with lucerne hay, to make up for the seed's deficiency in protein. In all cases care must be taken to use only good sound and properly matured seed. Unless quickly dried it is very liable to heat and become infested with insect pests. Quick reduction of the moisture content can best be accomplished by storing in a loft and using a rough kiln-drying method, after the manner practised on some of the northern rivers of New South Wales for preparing maize for the early markets. Thorough ventilation and free circulation of air through the stored grain may be attained by storage in smaller bulk, and by the use of special ventilating devices made with wire fly-screens on the floor of the barn and distributed through the heap. Specially constructed bins to hold 50 or 100 bushels well repay their cost in a season or two, with intelligent use of the seed on the farm.

Reverting again to cultivation. Millets, in common with all other summer crops, give most satisfactory results when manured. This applies to even where grown on fairly rich soil, and is absolutely imperative on poor land. Broadly speaking, the greater the growth of fodder the greater the number of stock that can be grazed, and that means richer land for succeeding crops.

Referring to Victorian conditions, Mr. T. A. J. Smith recommends from 1 to 2 cwt. of superphosphates per acre in the colder and heavier rainfall districts, according to the quality of the soil. For coastal country a mixture of two-thirds superphosphate with one-third Thomas' phosphate has proved good. Half and half mixtures of super. and bone dust suit sandy soils. Nitrogenous manures are of use in Gippsland and other cool climates, and blood manure—from ½ cwt. to 1 cwt. applications—is good, applied either three weeks before the crop is sown or at the same time. Sulphate of ammonia in 1 cwt. quantities is also good on sandy soils, put on just before or when the seed is sown. Where nitrate of soda is used it should be applied in ½ cwt. to 1 cwt. quantities after the crop has appeared above the surface. Gypsum in soils deficient in lime has proved a benefit to millets, particularly in 5 cwt. dressings, but the effect is not felt so much the first year as in the following seasons. For other soils, where lime is plentiful naturally, superphosphate alone is sufficient. Wherever farmyard manure is obtainable it will be found of great value, but it must be in a well rotted condition, and is better not applied in too great quantity, from twenty to thirty loads per acre being sufficient when well worked into the ground.

Reliable seed can at the present time be obtained from the leading seed merchants at from 75s. to 85s. per cwt.

Australian Grain Crops.

An Excellent Season.

After a dry spell lasting from six weeks to two months, bounteous rains fell over practically the whole wheat belt during the second half of May and early this month. In Victoria and South Australia, where conditions were particularly dry, two to four inches have been recorded, and the average in Western Australia has been considerably heavier. The falls in New South Wales have also been general, and some heavy totals have been recorded. On the whole, the outlook can now be summed up as excellent throughout the Commonwealth.

In New South Wales, where a comparatively early sowing of wheat is usual, the bulk of the crop went in in May and under ideal conditions. A clean seed bed was possible, and germination promises to be good. Some of the April sown

grain came up rather patchy, but thanks to timely rains few paddocks will have to be reseeded. Most districts report increased areas under wheat, and it is quite possible that the total may be over four million acres, as compared with 3,656,000 last season.

The majority of farmers in the southern States prefer to wait until June or July before making their main sowing. As a matter of fact, in tests carried out at the Longerenong Agricultural College, Wimmera district of Victoria, and elsewhere, the averages for a period of years show that, with Federation wheat, sowings made the last week in July yield up to two bags per acre more than fields cropped the end of May or early in June. Even with a late wheat like Yandilla King, sowings made the end of July have been proved to yield up to one bag an acre better than those put in early. Apart from thoroughly soaking the soil, the recent rains will start weeds in the fallows. There will now be time to turn these in and clean the paddocks up generally. Given reasonable weather, the next few weeks will be very busy ones on farms. As with New South Wales, a fair increase in area is anticipated.

It may be mentioned in passing that many practical men follow the practice of applying larger quantities of superphosphates with late sown wheats than with early ones. An extra 15 to 30 lbs. an acre are generally used, and the increased yield usually obtained makes it well worth while. There is a scientific reason for this. The action of super is to quicken the growth of plants, and, up to a certain point, the greater the quantity applied so much greater will be the acceleration, other things being equal. Obviously, it is important that a late sown crop should get a good start before the spring so as to enable it to take full advantage of the congenial growing conditions that prevail then. Extra super will enable it to do this. Also quickened growth means that the crop comes to maturity earlier, thus lessening the risk of damage from adverse weather and insect pests.

The South Australian Government Statistician has issued his final estimate regarding the 1920-21 harvest. From this it appears that the total area sown with wheat last year was 2,501,448 acres, as compared with 2,449,837 in 1919. The area reserved for grain last season was 2,163,646 acres, and the yield 34,236,914 bushels, giving an average of 15.82. The oat area is shown as 423,379 acres, 180,833 being saved for grain, and yielding 2,511,465 bushels, a record for the State. Hay production amounted to 477,845 tons wheaten and 275,879 tons oaten.

A delegation from the Victorian Farmers' Union last month waited on the State Assistant Minister for Agriculture to urge the establishment of a pool for oats, barley, maize and lucerne. It was said that such a pool would stabilise the fodder trade, and make supplies available in times of drought at a reasonable price. The idea apparently is to have a compulsory pool financed by the Government. Silos would have to be erected for the storage of surplus grains, and it was suggested that the prices of oats and other fodders be fixed by a board consisting of representatives of the growers, co-operative companies, and the Government.

Mr. Hill, M.H.R., in speaking to the proposal, pointed out that the conservation of fodder in years of plenty for lean years was a matter of national importance. It would cost between £300,000 and £400,000 to finance the first year of the pool, assuming that there was a surplus of between 3,000,000 and 4,000,000 bushels of oats to conserve at 2s. 6d. a bushel, a price that would return the grower a reasonable profit. There might be an additional 2,000,000 or 3,000,000 bushels the next year. When the next drought came the whole reserve could be placed on the market at a price which would cover the original cost of the fodder, plus storage charges, interest, and other expenditure. The Assistant Minister gave a non-committal reply, asking the members of the deputation to supply fuller detailed information, and to say exactly what the Government was expected to do.

The Pools.

It is announced that a further advance of 1s. 3d. a bushel is shortly to be made in all States on wheat delivered into the 1920-21 pool. The date of the payment is not known at the time of writing, but it is expected to be somewhere

about the end of June. There is still no definite word as to when the earlier pools are to be closed. For years now it has been promised that they shall be finalised "soon," but the soon does not seem to get much nearer. After the May meeting of the Australian Wheat Board the chairman said that he was satisfied that the States are taking urgent steps to have the data necessary for all adjustments completed at the earliest possible date. He and the board may feel satisfied, but it is very certain holders of scrip do not, and we understand that legal action is possible in one State at least with the object of hurrying up dilatory officers.

Questions in the House of Representatives elicited the fact that 300,000 tons, say, 11,200,000 bushels, of wheat had been sold to the French Government on 14th February. The price was 112s. 6d. a quarter, c.i.f., which works out at about 14s. a bushel. The freight was not mentioned. The Acting Prime Minister also stated that satisfactory sales had been made to Germany, but particulars could not be published.

Statistics supplied by the board show that receipts on account of the 1920-21 harvest amounted to 130,844,000 bushels on 30th May. The contributions by the various States were then:—New South Wales, 50,575,000 bushels; Victoria, 38,382,000 bushels; South Australia, 31,426,000 bushels; Western Australia, 10,461,000 bushels. The shipments overseas on the date mentioned totalled 57,307,000 bushels, which, when compared with the figures given for 2nd May, indicate that just on 12,000,000 bushels were cleared during the intervening four weeks. Local sales on 30th ultimo accounted for 12,728,000 bushels, and the holdings by shippers and millers stood at 60,809,000 bushels. The bank overdraft at the end of May on account of all pools was £3,226,000.

The question of continuing the wheat pool into next and subsequent years has been discussed at considerable length in most States since last writing. It first came into prominence at a conference of the Australian Farmers' Federal Organisation held in Melbourne the middle of May. Representatives from all four of the main wheat-producing States attended, and unanimous resolutions in favour of a compulsory co-operative pool, to be controlled by representatives of the growers, were passed. Further, it was decided that the Federal Government be asked to exercise such powers as it may possess under the Constitution to ensure that wheat shall not be dealt with except by the proposed growers' pool, and that the State Governments be asked to co-operate for the purpose of taking a referendum of the wheatgrowers of Australia. The scheme approved of at the meeting provides for the election of State and Federal councils of management. The duties of the State bodies will include the reception, handling, and care of wheat; the provision of depots, materials, storage, and treatment plants; and payments to growers. The Federal council will deal with questions of general policy, fix amounts to be advanced to growers, arrange all overseas sales, charter freight for overseas contracts, and apportion shipping among the States.

While the conference was sitting a meeting in opposition to the pooling system generally was convened and held, also in Melbourne, under the auspices of the South Australian Farmers' Committee. The main speaker, Mr. A. L. McEwin, who claimed that he spoke for 80 per cent. of the wheatgrowers in South Australia, said that they stood for freedom in marketing primary products. Those present decided to hold discussion over until a later meeting.

Almost without exception all other meetings that have been held to consider the question, and they have been quite numerous, have been in favour of a co-operative pool. Perhaps, though, this can be explained by the fact that only those who want one have troubled to attend. Anyhow, it is striking that most of the Governments which have been approached on the matter have more or less definitely refused to give legislative support to the scheme. Further, the Governments of Victoria and South Australia have said straight out that they will not take a referendum on the subject. The reason in both cases is that the Ministry is opposed to Government trading and compulsion in any form. It is argued that a ballot would only be shifting the responsibility of a decision on to other shoulders, a responsibility which the Ministry is quite prepared to take up.

Mr. Dunn, representing the New South Wales Government, has given a guarded reply to the request for a referendum,

fearing that the form in which questions are being put may be construed as a vote of censure on the administration of the State Wheat Board and himself. He thought that if one straight-out question were asked, such as "Do you want a pool next year or not?" the Government might help them. He added that he did not think the Government was anxious to continue the pool.

Neither was the Federal Government's answer to a request for financial backing very promising. True, Sir Joseph Cook advised the Farmers' Organisation to take a ballot, but at the same time to consider the possibility of financing a pool themselves. He twitted them with wanting a compulsory pool, and Government backing, but not Government management. Further, he pointed out that the Federal Ministry would not favour the scheme in face of the expressed wish of the people or the States to the contrary.

Despite the official cold water that has been thrown on the scheme, it is understood that the Farmers' Organisation has completed arrangements for taking an independent ballot in Victoria, New South Wales and Western Australia. In a semi-official statement it is announced that if a pool is not carried out under Government control it is proposed to organise one under the control of the growers.

The proposed growers' pool is to take over, as far as possible, the existing wheat pool machinery, which will be controlled by a board of management, and on which the growers will be fully represented. Negotiations with the banks are said to make it possible that an average price of not less than 7s. 6d. a bushel could be paid to the grower, a rather optimistic forecast. The voting will be on the preferential system, three questions being submitted as follows:—

1. Are you in favour of a compulsory wheat pool for a period of three years controlled by representatives elected by ballot of the wheatgrowers?
2. Are you in favour of a compulsory wheat pool under present conditions?
3. Are you in favour of an open market?

It will be noted that the growers' pool is to have a life of three years.

Markets.

Official quotations issued in London by the British Wheat Controllers were varied two or three times during the second half of May. The cable information is rather vague, but apparently a reduction of 1s. per quarter was made about the 18th, the amount restored four days later, and taken away again at the end of the month. Anyhow the latest c.i.f. quotes per 480 lbs. are:—F.a.q., 75s.; A grade, 70s.; B grade, 64s.

Owing to the operations of speculators and adverse seasonal reports, wheat values at Chicago have recently been subjected to violent fluctuations. The end of April 4s. 6d. a bushel was the prevailing price in the States. However, concerted action on the part of growers in refusing to deliver grain forced the price up to 7s. 0½d. by about 23rd May, when heavy supplies from Canada caused a drop. From then until the beginning of June values seem to have steadily slumped, but early June was marked by another rise, due, it is said, to bad reports regarding the condition of the new winter crop. On 2nd inst. July wheat was quoted in Chicago at 5s. 8¾d., with a firm market.

The Australian Wheat Board, to be in the fashion, has also made various changes in the quotation for wheat supplied to millers for gristing into flour for export. The price has been advanced from 7s. per bushel in three stages to 8s., at which figure it stands at the time of writing. Local consumption rate remains unchanged. The following is the official quotation of the board:—Millers' requirements for flour for local consumption, 9s.; for flour for shipment to South Africa, the East, Pacific Islands, New Zealand, June-July, 8s.

In connection with the South African trade a Capetown cable of 13th May states that the South African Ministry is applying the dumping clause in the Customs Act to Australian flour and meal on the ground that it is sold for export at a price which does not represent its current value in the open market. The proclamation announces that six weeks from the date of issue a special "dumping duty" will be levied on flour and meal from Australia equal to the difference between the prices at which they are sold for home consumption and the prices for export to South Africa, provided that the duty does not exceed 15 per cent.

The proclamation naturally caused surprise and indignation amongst Australian traders, especially as the Government had already notified its intention to reimpose the import duty of 2s. 3d. per 100 lbs. on flour. It is understood that the Commonwealth Government is in communication with the Union Government in the matter.

Fodder.

The market for feed grains and mill offals has been weak, and prices generally show a downward tendency. The most notable variations in values during the month are a drop of £2 a ton in bran and pollard in Melbourne and 7d. to 8d. a bushel for maize in Sydney.

The following are current quotations for wholesale lots of good quality in Melbourne, compared with those ruling a year ago:—

	June 7, 1920.	June 8, 1921.
Bran (2000 lb.) ...	£8/10 -	£9
Pollard (2000 lb.) ...	£9/10/-	£9
Oats, Algerian (40 lb.) ...	6½ to 6¼	2¼ to 2/6
Maize (56 lb.) ...	9/9	4/8
Chaff (ton) ...	£12 to £12/13/6	£4 to £4/15/-

In Sydney, bran is £9 6s. 3d. and pollard £10 6s. 3d. a ton at mill; oats, Algerian feed, are 3s. 3d. a bushel; maize, prime dry Northern Rivers, 4s. 6d. for yellow and 4s. 3d. for white; lucerne hay, Hunter River, £3 to £5 a ton.

Adelaide quotations for bran and pollard are £10 10s. a ton ex mill; oats are 2s. 6d. to 2s. 8d. a bushel; chaff, £5 10s. per ton at Mile End.

Agricultural Notes.

Private cable advice received the beginning of June reports that the surplus of wheat in Argentina is 80,000,000 bushels.

During 1920, 2,300,000 acres of the devastated area of France were sown with crops. Of these 753,467 were put under wheat, 826,537 under oats, and the balance beets, rye, barley, and other crops.

The United States Congress has passed a bill that aims at preventing gambling in grain "futures." The bill places a tax of 20 cents (normally 10d.) a bushel on grain sold purely speculatively, of which the buyer and seller have not physical possession.

The Illinois (U.S.A.) State Senate last month passed a bill introducing Government regulation of grain exchanges. The bill prohibits the buying and selling of grain future deliveries without actual ownership. It is predicted that the Chicago Board of Trade will be forced to act, Chicago being located in Illinois. It has already been invited to Toledo (Ohio).

The United States Department of Agriculture estimates the total United States Wheat Crop at 832,000,000 bushels, the oat crop at 1,405,000,000 bushels. The combined winter and spring wheat crops will therefore be 43,000,000 bushels larger than last year. The crops of oats, barley, and hay will be smaller.

"The Daily Express," London, states that the British Cabinet has decided to shortly decontrol agriculture, both with reference to guaranteed prices to farmers and to wages. It is believed that the agricultural wages board will be permitted to continue for a sufficient time to allow the necessary adjustments being made, but the guaranteed prices for wheat and oats will disappear when the present crops have been harvested. The decision of the Cabinet is attributed to the financial crisis, and was precipitated by the coal strike.

Argentine Grain Exports.

(TO BRAZIL INCLUDED.)

	Total 1919.	Total 1920.	1921. 1st Jan. to 18th Mar.
Wheat tons	3,258,950	5,029,965	391,836
Maize tons	2,374,791	4,387,736	384,424
Linseed tons	840,272	1,014,340	246,271
Oats tons	331,350	410,537	87,756

ACRES SOWN.

	1919-20.	1920-21.
Wheat	16,135,600	15,190,280
Linseed	3,563,000	3,624,695
Oats	2,347,500	2,067,500

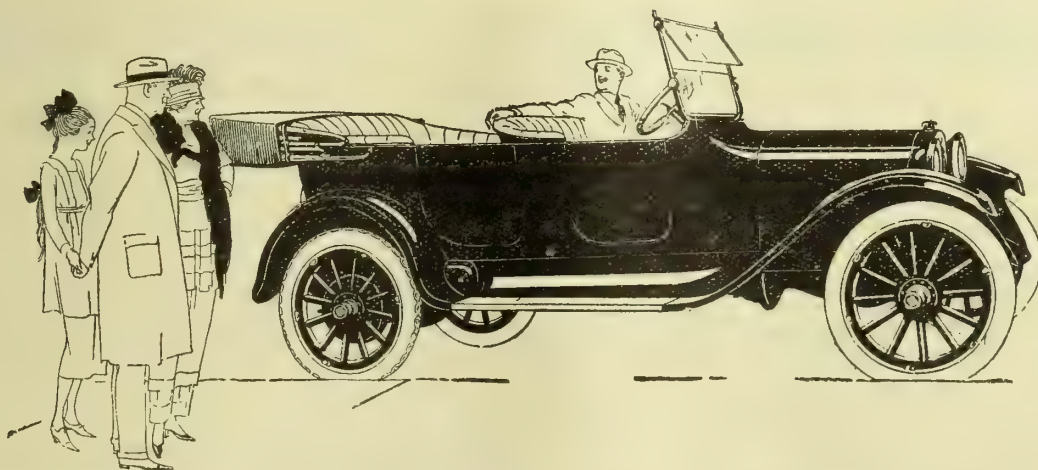


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16-6-21.

The Wool Trade.

The Wool Trade in Australia and New Zealand.

The history of the past month makes more pleasant reading than for some time since—a matter of the keenest interest, not only to woolgrowers, but to Australia as a whole, for undoubtedly her pastoral industry is of paramount importance.

Sales which have been held in Brisbane, Sydney and Adelaide have witnessed a series of clearances which have been uniformly satisfactory.

Granted the level of values (except in special cases) is comparatively a low one, and in the case of coarse crossbreds below the cost of production, the fact has been clearly demonstrated that a demand exists for practically all grades, and also that the market can absorb the quantity which is now being placed on it.

It is the more significant that this condition of affairs exists despite the coal strike in England, which has largely disorganised trade, and the almost daily developments occurring on the Continent, that lead to all sorts of political complications. Exchange has also recently been somewhat adversely affected, and yet the demand continues.

At least it may be postulated that a foundation has been reached, and given that return of confidence which is the very essence of trade provided a sure base exists, we may look forward to a slow but steady improvement generally. It must not be overlooked, however, that while the barometer is apparently "set fair," so far as the current clip is concerned, but little headway is being made in the realisation of the great accumulation of the carryover staple. Further, the majority of the wool on hand is of inferior quality, and catalogues in all centres disclose a low standard of intrinsic value, which is all the more reason that every effort should be made to dispose of the wool on hand before the new clip comes along to give point to the old adage, that comparisons are odious.

This can only be done by increased allocations for the next few months, and if we do not take advantage of the demand that does exist, other countries will.

It is understood that a minimum of 110,000 bales has been agreed to for July, and it is hoped that the controlling bodies will be able to increase that to at least 150,000 bales.

B.A.W.R.A.

Last month the usual conference of B.A.W.R.A. and the executive of the National Council of Woollselling Brokers took place to arrange the quantity that should be offered in June, but without being able to effect a final decision. The so-called deadlock committee came into being, and on the casting vote of the chairman of B.A.W.R.A. the quantity was limited to 110,000 bales, despite brokers having strongly recommended 150,000 bales. As a matter of fact, the deadlock committee is not very convincing, as with numbers evenly divided (which has happened on each occasion it has met), B.A.W.R.A. controls the situation. In many quarters it is keenly resented that while the essence of the scheme was collaboration between the two bodies, in effect it works out as domination by the one.

The next conference takes place during the middle of the month, and it is realised that it will be increasingly difficult to provide a *modus vivendi* if B.A.W.R.A. maintains that autocratic attitude which has come to be so generally associated with its methods.

This is intended in no sense to depreciate the good work done by the chairman in his capacity as chief of the Central Wool Committee, but on this occasion he is no longer clothed with powers under the War Precautions Act, and is open to fair criticism, beyond which nothing is hereby implied.

Allocations.

The June allocations are set out as under, viz. :—

	Bales.
New South Wales	54,000
Victoria	35,000
South Australia	11,000
Tasmania	10,000

this latter being in the nature of a general clearing up round.

Dates are :—

	Bales.
Sydney, 7th to 14th June	30,000
Melbourne, 7th to 14th June	22,000
Geelong, 15th and 16th June	9,400
Sydney, 15th to 22nd June	24,000
Tasmania, 20th to 26th June	10,000
Albury, 23rd June	3,000
Adelaide, 1st July	11,000

Although Brisbane has been set down for 30,000 bales on the 28th of the month, it is understood that such is really the July quota for that centre. The date conforms to the general practice of Queensland sales, and buyers are entitled to be studied wherever possible. In fact, if a little more tact had been used, a good deal of unnecessary friction would have disappeared. It is only fair, however, in this connection, to pay tribute to the heads of the Customs Department for the way in which they have met a situation which, if not intelligently interpreted, would have resulted in many irksome regulations. As a matter of fact, today, buyers by entering into a personal bond have but little more work to perform than under normal conditions, selling brokers' certificates being accepted as the basis of granting permission to export.

Fellmongered Wools.

After much discussion it has now been definitely determined that sheepskins and the wool product of such are to be eliminated from the provisions of the special regulations attaching to the export of wool, beyond the production of a declaration that such is what it purports to be. This is only as it should be, and as it concerns at most not more than 5 per cent. of the total clip, should not have been allowed to take up so much valuable time.

Much discontent was manifest until the foregoing decision was arrived at, and the effect on sheepskin sales was exhibited in a much better demand, and a general upward tendency, in which, however, the march of the season doubtless had some influence. The above matter was brought up in the House of Representatives last month by Mr. E. Jowett.

Fresh Channels for Wool.

Reference was made in these columns last month to the fact that an experiment was being conducted in the use of wool for the production of sewing twine. This has now been carried out, and it has been demonstrated that a twine quite suitable for graziers' use for sewing bales can be made at a cost not exceeding that of ordinary hemp twine.

It is not likely to be a commercial proposition, however, as any material rise in the value of coarse wools would naturally preclude its use, but to the extent that it is now available (though in limited quantity) it should be used wherever possible. In other directions it may find a use, and at 3s. a pound or thereabouts it should be possible to turn it to advantage in more homelier employment than the above.

No further developments have taken place in regard to an all-wool pack, but it has not been lost sight of, and will be heard of again before long, the main difficulty at the moment being to find the necessary machinery.

U.S.A.

The Emergency Tariff Bill, which was vetoed by ex-President Wilson on 3rd March, and which was reintroduced, became effective on 28th May. It provides for a duty on wool (unwashed) of 15 cents per lb., on wool (washed) of 30 cents per lb., and on wool (scoured) of 45 cents per lb. American operators have not made themselves heard for some time and the foregoing will serve to explain at least part of the reasons for their silence.

AUSTRALIAN SALES.

Victoria.

The June series of 35,000 bales commenced on the 7th inst. in Melbourne, when some 6600 bales were submitted, containing a fair proportion of good Merinos, although the great bulk of the offerings were naturally crossbreds.

For the best Merinos, prices were somewhat disappointing in the face of late rates, but for all top-making sorts competition was keen and vigorous, prices being some 5 to 10 per cent. better than May rates, the improvement being specially noticeable in pieces, &c.

Comebacks and fine crossbreds had good inquiry at some 5 per cent. advance on May rates, but coarse crossbreds were unchanged.

The Continent was again much in evidence, competing spiritedly on all suitable lines, but despite which Bradford again proved themselves the mainstay of the market in lifting the majority.

Local mills lent support, but except in isolated cases America was silent, Japan also not being heard of, although there were several parcels offering that should have suited her book.

Some of the leading prices included Brooklyn/RNJ, 19½d.; Rippon Lea/JEH, 18d.; Tiverton & Tottington, 16d.; Tupra/HCK, 14½d.; Boonoke, 14d.; Yeadon, 16d.; Billabong/RIC, 16½d.; Brippick, 16d.; and Coliban Park (privately, ex auction) 22d.

Sydney.

After some delay consequent on the full text of the Customs regulations not having been received, sales were held on 12th May, covering about 12,000 bales. The improvement noted in Melbourne at the commencement of the week was fully maintained, competition under Continental demand being quite reminiscent of pre-war days.

Good support was received from the Japanese sections, who were keen buyers of fine wools, of which, however, not many were submitted.

A pleasing feature was the good clearance made, and generally speaking the position was highly satisfactory.

Up to 28½d. was given for the HH/Dundee from New England.

Sales were resumed again on Tuesday, 24th May, when the final series of the month's auctions was dealt with. An agreeable development was the attention paid to faulty sorts, the greatest improvement being noticeable in the lower grades of Merinos and carbonising pieces and bellies. Crossbreds, except the coarser grades, were in better request. On the other hand, the edge had gone off in the competition for the best wools, although at times no fault could be found with such.

Catalogues comprised some good New Englanders, and clips from the southern and central tablelands. Prices included:—WC/Lyndhurst/New England and FSR/Walcha, both up to 27½d., with the WC/Underwood/Uralla at 25½d.

The May series closed during the following week under satisfactory conditions generally, with a hardening tendency for topmaking sorts, but with more discrimination shown in the purchase of the best lots, in which Japanese buyers were predominant. Up to 27½d. was given for the AN/Ohio from Walcha, and 25d. for the HFM/Kingstown from Uralla.

The decrease in the arrivals of wool in Sydney up to the end of May, as compared with the corresponding period of last year, was 126,094 bales.

The total sales for the season to the same date amount to 236,087 bales, as compared with 704,979 bales under the appraisal scheme up to the end of May.

June series opened under favourable conditions, with a general hardening tendency for all but the very best lots, which were distinctly easier. Continental competition strong and Yorkshire active.

The weakness in the best lots is certainly disappointing, as it is felt the growers of quality wools need the greatest encouragement, and it is difficult to see why super wools, which must be in short supply, should be overlooked.

Brisbane.

Sales in the above centre were held on 17th May, the quota being 25,000 bales. As no auctions had been held since February, keen interest was taken in the proceedings, both in and out of the trade.

Generally speaking, the offerings were only of a medium character, comprising a fair proportion of faulty parcels, although a few good wools were submitted.

Sydney rates were well maintained, Japanese operators taking the best lots.

Some of the leading prices were:—In Greasy, CB/Rosenthal, 24½d.; WJC/Rockdale, 23d.; BXM/Huntly, Ightham and Q Bros/Oxton Downs, 19d.; Welltown, 18d.; and in scoured, Afton, 36½d.; Rockwood, 36d.; Tarcombe, 32½d.

Adelaide.

May sales in Adelaide took place on the 27th of the month, 10,860 bales being offered, and practically all cleared.

The general clearances have been perhaps the most satisfactory feature of recent sales, and point the way to an earlier realisation of the 1920-21 clip than was thought possible not long since.

The selection was a typical Adelaide collection, appealing mainly to the Bradford section, who lifted the great weight of sales.

Leading prices included:—WRC/Herrmann and Co/Rondenella, 16d.; GP (in tria.)/MP, 14d.; JD Netley and Comonella, 13d.

At the beginning of the current month, brokers took advantage of a week when no sales were held in southern centres, and placed on their floors for private sale a good quantity of wools passed in out of earlier catalogues. Satisfactory clearances were made, thus enabling many partly-sold clips to be cleaned up, some 13,500 bales being got rid of in this way.

Oversea Sales.

The Chairman of B.A.W.R.A. was advised by cable that at the Antwerp sales at the end of last month, 10,000 bales were offered, 9000 sold. Greasy Merino fully 5 per cent., scoured Merino par to 5 per cent., dearer than London closing rates; carbonising crossbreds no change.

Following on this, London sales opened on the 7th, with an allocation of 110,000 bales, of which 60,000 bales are Bawra, to be followed by auctions at Liverpool on the 22nd, of 22,000 bales.

Cabled reports of the first day's auction, which consisted of free wools, are to the effect that Merinos advanced from 7½ per cent. to 10 per cent. above May rates, the greatest improvement being noticeable in scoureds.

Short Merino wools, suitable for Continental requirements, also pieces and bellies, were in demand.

Fine crossbreds par to 5 per cent. higher; medium to coarse firm but unchanged.

Germany operated freely, but the Home trade was reserved, which calls for little surprise in the face of the industrial position.

At first glance it may seem strange that the Home trade is so active in Australian markets, but it may be remembered that the wool being bought on this side to-day will not be in users' hands for at least two months, and much can happen before then.

Further Extension of Control.

In view of a proposal to entrust B.A.W.R.A. with the sale of the Australian wool clip for the next five years, with a reserve of 9d. per lb., the remarks by the chairman of the company as reported in the press are of interest.

It may be, however, accepted that the proposal is not likely to find support, and it has already been trenchantly criticised. Sir John Higgins, in reply to one of these criticisms, says:—

The general position in respect to the market for wool is covered by the statement I made before the Acting Prime Minister on 26th May, when the financial position of certain of the graziers of New South Wales was under discussion. I said:—"If you can get every producer of wool in Australia to say that he will sell his wool through Bawra on some flat rate to be determined for a term of five years, I would undertake to submit the matter to my colleagues here and also in London. If this guarantee were given I think that there would be some chance of helping you. If we could control the sale of all wool I think it would be possible to render financial assistance. You cannot expect this assistance if portion of your wool is controlled and portion is not. I am not asking now for Government control or assistance in any shape or form. The price would have to be considered from time to time in accordance with the conditions, and it would be the business of Bawra to consider these conditions. If you gentlemen can bring every woolgrower into line I would promise to assist you." The point is that if I am given security of tenure, the organisation will be able to do its work to the best advantage, and can give better financial assistance. We do not want Government control any more than anyone else. Such control was forced on us by the action of certain banks in London. In any scheme, or in any industry, if you desire to obtain the best results you must have security of tenure. Every care has been taken by those in control of Bawra affairs to satisfy the market requirements for wool. That has not been done from carry-over wool, but from the free wool, as Bawra has been generous in allowing free wool to have priority ever since October last. What has to be recollected in respect to the offering of Bawra wool is that the association, as agents for the British Government, must carry out the instructions of its clients in respect to the disposal of carry-over wool. They are to arrange for the sale of the wool on reasonable terms as soon as possible, and all the time to have regard to the interests of the woollen industry of the Empire.

Reopening of New Zealand Sales.

There was considerable satisfaction over the results of the wool sale at Wellington on 26th May, when of 11,000 bales, some 75 per cent. was sold.

Buyers attended in full force, and represented New Zealand, Bradford, the Continent, America, and Japan. Bradford bought extensively. France was also active, but America was not keenly interested. Fair buying orders were held for Japan. The result was, generally, a satisfactory clearance of catalogues.

Prices were well above London parity. Bradford was keen to obtain top-making wools, of which there was a very good range, and much interest was taken in the rather limited number of lots of short fine wools suitable for the Continent. Buyers held a fair number of orders in hand for these classes of wool, and competition was keen. The range of values on the whole was satisfactory. There was some inquiry for fine Romneys for America at 6½d. to 7½d. No good Merinos were offering, but 9½d. to 9½d. was obtained. No half-bred super was offered, but medium reached 8½d. and inferior 7½d. There was a good inquiry for better class lambs', but it was noticeable that the demand for these came from overseas buyers. Prices ran up to 8d., New Zealand securing a fair proportion.

Prices generally were 1d. to 1½d. per lb. below the rates ruling at the January sales.

The Napier sales were held on the 31st ult. The catalogue comprised 8405 bales, and in spite of the fact that all the wool carried a reserve, something like 80 per cent. was sold. Prices, on the average, showed an increase of about 10 per cent. on Wellington rates, representing an increase of ½d. to 1d. per lb. on fleece wool. The buyers present represented New Zealand, English, American, and Continental houses. Competition was brisk throughout. Top price realised, 10½d., was for a line of Southdown wool. Super clean crossbred wool was sold to American buyers at from 5½d. to 8d. Fully 60 per cent. of the wool quitted was taken for Bradford. Most of the remainder was distributed between New Zealand mills and America.

Buyers were disappointed at the almost complete absence of lambs' wool, a circumstance evidently due to farmers' reluctance to pay the charges demanded for shearing.

AUSTRALIAN WOOL EXPORTS.

From 1st July, 1920, to 31st May, 1921.

Compared with corresponding period last year.
Eleven Months.

	Season		1920-21.		Increase.	Decrease.
	1919-20.	1919-20.	1920-21.	1920-21.		
	Bales.	Bales.	Bales.	Bales.	Bales.	Bales.
New South Wales	703,456	627,095	368,455	—	258,640	
Victoria	533,604	469,065	301,012	—	168,053	
Queensland	553,964	327,136	237,465	—	89,671	
South Australia	195,865	180,142	109,334	—	70,808	
West Australia	160,550	143,721	71,316	—	72,405	
Tasmania	30,247	30,247	9,069	—	21,178	
	1,977,686	1,777,406	1,096,651	—	680,755	
	Net Decrease, 680,755 bales.					

Considerable quantities of wool grown in some States are shipped from others, therefore the above figures do not show actual production of each State, but the total overseas shipments.

New Zealand Exports from 1st July, 1920, to 31st March, 1921, 342,550 bales. Figures for the same period 1919-20 were 389,087 bales.

WOOL ARRIVALS AT SEABOARD IN AUSTRALIA.

From 1st July, 1920, to latest dates.

State.	Date.	Bales.	Bales.
New South Wales	June 2, 1921	—	506,754
Victoria	June 4, 1921	—	289,112
Queensland	April 30, 1921	—	
Townsville	—	70,339	
Rockhampton	—	48,937	
Brisbane	—	163,334	
			282,610
South Australia	May 28, 1921	—	
Port Adelaide	—	113,767	
Other ports	—	20,689	
			134,456
West Australia	April 16, 1921	—	
Fremantle and Albany	—	40,667	
Geraldton	—	18,450	
			59,117
			1,272,049

Central Wool Committee.**Payment to Woolgrowers.**

The Central Wool Committee notifies woolgrowers and others interested in wool appraisements for the season 1916-1917 (in part), and the complete seasons 1917-1918 and 1918-1919 and 1919-1920, that a division of assets (recently valued at £22,000,000 and now represented by £10,000,000 of priority wool certificates and £12,000,000 shares of £1 in the British Australian Wool Realisation Association Limited) will take place on or before 31st July next.

The Central Wool Committee has been advised that it has been decided by the British Australian Wool Realisation Association Limited on or before the 31st July next—

- To pay 47.5 per cent. of the face value of the priority wool certificates, equivalent to a cash payment of £4,750,000; and
- To retire all wool interests representing in value for the four seasons appraised wool of £100 and under, on a cash basis.

The Central Wool Committee, for the protection of parties interested, emphasises the advisableness of payments, dividends, wool certificates and share certificates wherever practicable being handed directly to those parties. Where it is impracticable for any party interested to directly receive payments, dividends, priority wool certificates or share certificates, he may empower an attorney or agent to receive them for him by signing and forwarding to the Central Wool Committee an authority in the committee's official form of authorisation.

Official forms of authorisation may be procured from the Central Wool Committee, and no other form of authority will be accepted or recognised. Signatures to the official form of authorisation should be witnessed by a Justice of the Peace wherever possible, but where this is impracticable the Central Wool Committee will accept signatures witnessed by responsible men such as clergymen, doctors, solicitors, bankers, woolbrokers, schoolmasters or postmasters.

Official forms of authorisation must be properly signed, witnessed and lodged at the office of the Central Wool Committee, 113 William-street, Melbourne, on or before 30th June, 1921, to facilitate the distribution.

It should be understood that this distribution will be made direct by the Central Wool Committee, in conjunction with "Bawra," and not, as in the past, through the selling brokers.

Disposal of New Zealand Wool.**Co-operation with "Bawra."**

The Producers' Committee met in Wellington on 1st June to consider the report of Mr. A. E. Mabin, who recently came to Australia as a special commissioner on behalf of the New Zealand Government to report on the wool situation.

The meeting very fully discussed Mr. Mabin's report, and after hearing his further remarks decided to recommend the Minister to constitute a wool committee, consisting of five members of the Producers' Committee, with power to—

- Regulate wool allocations for auction sales in New Zealand;
- Fix reasonable minimum reserves on New Zealand wool and on a parity basis in New Zealand, Australia and London;
- Enter into such business and financial arrangements with the "Bawra" banks or other bodies as may be found necessary or desirable.

Subsequently the Minister for Agriculture was asked if he had any announcement to make respecting the Government's intentions. The Minister said he had not. The decision of the Producers' Committee had not reached him officially, and in any case the matter would have to go before Cabinet.

QUIBELL'S Improved Powder Sheep Dip
GIVES THE BEST RESULTS.

Canadian 1920 Clip.

All told, the annual wool clip of Canada approximates between 15,000,000 and 16,000,000 pounds, of which at least 4,000,000 never reach the open market, being used up on the farms in making homespun, yarn, comforters, &c. One-half of the remaining eleven to twelve million was last year and early in 1921 collected and sold by the Canadian Co-operative Wool Growers Limited, Toronto, Canada.

Advances were made of 7½d. on domestic and 10d. on range wool, upon receipt of the wool at a central point in each province. Shipments were further financed in that the transportation was in each case paid by the organisation, and the handling charge of 1d. per pound was not levied until the rendering of final settlement. Thus advances were really made amounting to 10d. and 12½d. per pound.

Up to 31st December, 1920, close on 3,000,000 pounds had been placed at the satisfactory average price of 16½d. per lb., this average being made possible by the fact that several sales were made early in the season at prices ranging from 20d. to 27½d. These helped to balance such prices as 10d. to 12½d. obtained in November and December, illustrating the falling market throughout the season. After the New Year there was a somewhat better demand, and by the middle of February the balance of the wool on hand had been moved at prices that averaged about 10d.

The Sheep and Wool Division of the Department of Agriculture advise under date 21st April:—

"The market for Canadian wools continues fairly active.

and small offerings are readily absorbed at prices ranging from 14d. down to 7d. A considerable number of mills are running to full capacity, and business is gradually improving in practically all lines. New-clip wools are coming forward more freely, although it will be another month before any large quantities will be graded and offered for sale."

South African Woolgrowers.

Advances against New Clip.

The South African Prime Minister, General Smuts, before leaving for London last month made a statement on the wool position. The Government, he said, had been negotiating for the sale of the new clip to the British Government, but found difficulties in the way, and he was not sure whether it would succeed; therefore, in view of the financial situation, he had come to the conclusion that it was necessary, in order to assist the producers, to revive the scheme in operation before the war, whereby the banks, with a Government guarantee, would make advances against wool. Growers of wool and mohair would be entitled to an advance of up to 50 per cent. of the pre-war prices, which would enable them to tide over the period of financial depression. He praised the liberality of the banks, which had agreed to accept 6½ per cent. interest.

Later advice states that the Imperial Government has definitely cabled its inability to meet the South African Government's wishes regarding the disposal of the new clip.

Australian Wool Shipments.

Table showing the quantity of Wool afloat for all oversea ports.

Ship.	Destination.	Date of Departure from last Aust. Port of Calling.	Shipped from—						Arrived at Port of Destination.		Afloat Bales.
			N.S.W. Bales.	Vict. Bales.	Q'land. Bales.	S. Aust. Bales.	W. Aust. Bales.	Tas. Bales.	Date.	Bales.	
Port Lyttleton	London	Feb. 11, 1921			3,898				May 25	3,898	
Argyllshire	U.K. and Continent	" 18	2,881		1,572	2,344			" 7	6,797	
Port Lincoln	United Kingdom	" 22	3,042	7,891					" 14	10,933	
Port Melbourne	London	" 23		55					" 15	55	
Clan Ronald	London and Continent	Mar. 17	5,537		2,099	832			" 16	8,468	
Australpool	"	" 19	289				225		June 4	514	
Boorara	United Kingdom	" 19	349	120		1,943	601		" 3	3,013	
Medie	"	" 25	2,774	912	3,423				May 13	7,109	
Port Stephens	London	" 31	2,418	2,960	1,103				"		6,481
Aki Maru	Yokohama	April 1	8,327						"		8,327
Port Stephens	United Kingdom	" 1		2,960					May 22	2,960	
Vardulla	London and Continent	" 2		736					June 1	736	
Borda	London	" 9		190				149	May 13	339	
Mantua	"	" 9	448	413		606			" 14	1,467	
Australmead	United Kingdom	" 12		349		34	150		"		533
Carignano	Continent	" 13		921			82		"		1,003
Omur	London	" 13	576	370			560		May 25	1,506	
Themistocles	"	" 14	188		482		168		" 25	838	
West Camargo	San Francisco	" 15		154					"		154
Buteshire	Manchester	" 16		1,936			3,269		May 30	5,205	
Scottish Monarch	U.K. and Continent	" 16	71		472	52			"		595
Bandoeng	Continent	" 19		1,120		12			"		1,132
Barot e	United Kingdom	" 20	3,185	2,250		598			June 1	6,083	
Acanthus	"	" 21	262	13	78				"		358
To omo	London and Continent	" 21		608		126		2,000	"		2,734
Port Denison	London	" 23	391		460				"		761
Orontes	"	" 27	567	400	220				June 1	1,187	
Titan	Liverpool	" 27					1,164		"		1,164
Northumberland	United Kingdom	" 29	532		180	41		34	"		787
Demosthenes	London	" 30	206	24	85				"		405
Poona	U.K. and Continent	" 30							"		6
Seikai Maru	Japan	" 30	628						"		628
Esex	United Kingdom	May 1			3,895		49		"		3,944
Orville	London	" 3	146	313	925		324		"		1,708
Boonah	U.K. and Continent	" 5	75			30	690		"		795
Morea	London	" 6	221	457		100			"		778
Persia	United Kingdom	" 7	322	580	419				"		1,321
Ulysses	"	" 7	124	20	21				"		174
Tango Maru	Yokohama	" 8		182					"		182
Citta di Genova	Continent	" 13	236	241			191		"		668
Menado	"	" 13	222	212					"		434
Wiltshire	United Kingdom	" 15	250		617				"		867
Bakara	"	" 19		31					"		81
Eastern	Yokohama	" 20			201				"		201
Runt	United Kingdom	" 20	465	6,286	416				"		7,198
Wairuna	Vancouver	" 20		23					"		23
Orsova	London	" 24	155		1,278				"		1,428
Port Victor	Hull	" 28		2,524					"		2,523
Euripides	London	" 31	620	847	2,572				"		4,039
Nikko Maru	Yokohama	" 31		143	2,475				"		2,620
Totals										61,058	51,002

Our English Wool Letter.

(Specially written for "The Pastoral Review.")

LONDON, 21st April, 1921.

Trade Anxious for Stabilisation of Wool Values.

Great things have happened in the wool world during the past month, but they have meant little or no good to the growers of Australia and New Zealand. We have just come through another series of London sales, at which prices have moved to a still lower level. The coal miners are out on strike, and all the public services have been threatened to be brought to a standstill, but happily the worst developments seem likely to be avoided. Then the British-Australian Wool Realisation Association are continuing their efforts to stabilise wool values, and fix prices 25 per cent. above market rates. These things have had their influence upon the market, but as far as one can see higher prices for wool appear to be as far off as ever. The present low level of wool values is not regarded with satisfaction by any section of users, prices being where they are to-day through a combination of circumstances which should be generally recognised by growers. There are colossal weights of raw material which the trade has not money to lift, whilst consumption is not more than one-third what it was in normal times. These are the two main factors in producing such disastrous results in the wool textile world, the like of which neither wool growers nor users have ever known before. All this is the after effect of the war, and will be with us for a long time to come.

London Sales.

The auctions just finished only continued seven days, though it was originally arranged that they last three weeks. The opening saw prices depreciate anywhere from 10 to 20 per cent. for Merinos, and crossbreds 5 to 10 per cent. The fall was the most severe in the superior combing Merinos, that is, wools of which America had bought large weights during the previous three months. If we take such leading West Victorian clips as EO and WB/Trawalla, at the second series the first named sold to America at 36d. and Trawalla 33d. Last week EO commanded a bid of only 23d. and Trawalla 21½d. for grease combing. We need hardly say that these were passed in. It has had to be really good grease combing to fetch over the 20d. line, there being quite a number of good clips from New South Wales and Queensland which have sold from 14d. to 18d. For instance, Llanillo only commanded bids from 16d. to 18d. for the combing fleece, and was passed in. Midkin was also withdrawn at 14d., but RHR/Minnie Downs (Queensland) sold from 14d. to 17½d.; PRS/Congwarra, 14½d. to 16½d.; Mt. Abundance, 15d. to 18d.; Kynuna, 12d.; Myall Creek, 15d. Similar prices were made for leading Victorian and West Australian clips. Scoured Merinos have not made big figures, the highest price of the series being for Maxwellton (Queensland), which touched 37½d. Quite a big weight of scoured wool has sold at from 20d. to 30d. Crossbreds have not been largely represented, but some very good clips from New Zealand have been catalogued, and the range of prices here established cannot but mean loss to the majority of the owners. Market prices are such that it means disaster to all growers of crossbreds, but more so to those whose clips are of the Lincoln, Leicester, and Romney Marsh breed, particularly the two former classes. The trade seems utterly unable to absorb the coarse crossbreds available, and yet it would be unwise to advise New Zealand pastoralists to cease breeding their Lincoln and Leicester rams. By the time finer crossbred fleeces became available fashions might have changed very materially, so every grower must consider his own surroundings, and what his holding is best suited to carry.

Germany to the Fore.

One of the features of the auctions has been the active competition on the part of Germany; in fact, but for the dozen buyers from that country, the auctions would have been little better than a fiasco. French buyers have also operated moderately, so have Belgian, but the home trade has

been very reserved, due to the industrial unsettlement and a complete lack of improvement in the textile trade in general. Germany has bought actively of both Merinos and crossbreds, the last few days of the auctions seeing generally a 5 per cent. improvement on opening rates. Of course, America has been entirely absent, and for some months, possibly till next October, America is likely to remain silent until the West Victorian superior clips again come on to the market in Geelong and Melbourne. We have already given evidence of what the absence of American competition has meant, and if the home trade were at all decent, Huddersfield manufacturers would be well to the fore competing for the superior lines from West Victoria. However, they may take these with more avidity later on, although at the moment there is nothing to indicate any real revival at the manufacturing end of the industry.

Changes Seen.

The following is a useful table showing the alterations which have taken place compared with the close of the previous series:—

Greasy Merino, superior	.. ..	8d. to 10d.	per lb. down.
" " average to good	.. ..	2d.	"
" " poor condition	.. ..	1d.	"
" " inferior locks and pieces	.. ..	1d.	"
Scoured " superior	.. ..	10d.	"
" " average to good	.. ..	4d. to 6d.	"
" " inferior	.. ..	4d.	"
" " faulty locks and pieces	.. ..	3d.	"
Greasy " lambs, superior	.. ..	2d.	"
" " medium	.. ..	2d.	"
" " inferior	.. ..	1d.	"
" crossbred, fine superior	.. ..	3d.	"
" " ordinary	.. ..	2d.	"
" " medium superior	.. ..	2d.	"
" " ordinary	1d. to 2d.	"	"
" " coarse, superior	.. ..	1d.	"
" " ordinary	.. ..	1d.	"
" " lambs	.. ..	1d. to 2d.	"
Scoured " fine	.. ..	3d.	"
" " medium and coarse	.. ..	2d.	"
Slips " fine lambs	.. ..	2d.	"
" " medium lambs	.. ..	2d.	"
" " coarse lambs	.. ..	2d.	"
" " faulty classes	.. ..	2d.	"
Greasy Punta Arenas, well conditioned	.. ..	2d.	"
" " wasty	.. ..	1d. to 2d.	"
" Falkland Islands	.. ..	None offering.	"

South African Wool.

Snow white, super westerns	.. ..	4d. to 5d.	per lb. down.
" " super	.. ..	2d. to 3d.	"
" " medium	.. ..	2d.	"
" " inferior	.. ..	2d.	"
Greasy combing, light	.. ..	2d.	"
" " heavy	.. ..	1d.	"
" clothing, light	.. ..	1d. to 2d.	"
" " faulty	.. ..	1d.	"

B.A.W.R.A. Wools.

Things are not going at all well with the British Australian Wool Realisation Association. B.A.W.R.A.'s attempts so far to stabilise values have utterly failed, much to the regret of the writer. Sir Arthur Goldfinch's tactics do not seem to have been the wisest or the best. Readers will remember that he told the deputation from the British Wool Federation that waited upon him last January that the "rot in wool values had to stop," then he sent a letter to the chairman of the Colonial Wool Importers' Association, which contained at least one threat, and which the trade very much resented. He told the trade that "the fall in prices must be arrested not by improvement in demand, but by concerted resistance on the part of the sellers," and last week he gave to the press a further long statement, which was probably the outcome of the fiasco that was seen at the recent auctions. It was first of all decided to offer 60,000 bales of B.A.W.R.A. wools. When importers and the banks said that they would offer their quota and take the best price obtainable, B.A.W.R.A. determined to whittle down their 60,000 bales, and only offer 16,000 bales. On the second day of the series about 6500 bales were catalogued at reserves harmonising with prices ruling in the middle of February. Not a bid was forthcoming, the selling brokers wanting on average 25

per cent. above the prices ruling for free wools. The selling brokers were soon told to "wrap up," and the next day's catalogue, which was to comprise 10,000 bales of B.A.W.R.A. wools was entirely withdrawn. That closed the chapter so far as B.A.W.R.A. wools were concerned.

Efforts to Stabilise the Market.

The efforts which B.A.W.R.A. are making to stabilise the market are at least deserving of consideration, but whether the right thing is being done or not only time can determine. It is patent that B.A.W.R.A. realises that stabilisation of wool values is impossible unless woolgrowers' help can be enlisted in Australia, New Zealand and South Africa, and in his latest statement Sir Arthur Goldfinch states that "perhaps some other wool growing countries" may refuse absolutely to sell below certain agreed limits. That statement has not created the least concern among buyers. Nobody can blame growers for looking after their own interests, and if they think they can strengthen their position by holding up supplies for an indefinite period, by all means let them do it. Mr. Harry Dawson sums up the situation by saying, "although trade opinion is against artificial propping of prices, there is a general agreement that it is contrary to the present and future interest of the textile trade, and utterly destructive to confidence, to flood the market with unlimited offerings during its present state of extreme depression. Everybody agrees that a rest period is necessary for a recuperation of demand and confidence. If the trade were confident of B.A.W.R.A.'s powers to obtain the full co-operation of other owners, and of their determination to limit supplies in face of the financial and other problems involved, there might be a good chance of restoring confidence and tempting buyers to operate."

We need hardly say that all buyers are wanting stabilised prices, and are prepared to go on operating at to-day's values, but nobody can see the least justification for the enforcement of a programme which means paying 25 per cent. above to-day's market values either in Australia or London. Trade will have to very materially improve before B.A.W.R.A. can enforce this, and if it is attempted it will drive competition for wool to South Africa as well as South America. It is the great depression in the textile trade of Great Britain and France which is the real hindrance to increased wool prices, and until things improve, we cannot see any likelihood of really advancing prices or a greater demand for the raw material.

Improved Outlook.

A better feeling has developed in Yorkshire consuming centres as the outcome of the sales, and many personal friends are of the opinion that the bottom is touched. We sincerely hope it is. When the trade itself calls for a halt, we may expect improvement. It is high time that prices took a turn upwards, which undoubtedly is what is wanted to stimulate trade and bring out latent new business. Some seem to think that B.A.W.R.A. is making herculean efforts to stabilise values at 25 per cent. above recent rates in London, but it is doubtful if this can be done. Others think that there should be a sliding scale of increases established, and that values would not stop at that if general trade improved. However, the worst seems to be passed, and many are beginning to feel that wool is now worth buying by way of speculation, but what is wanted above all is improvement at the consuming end of the trade. If the present industrial strife ceases, and the German reparation question is got out of the way, the foundation will be laid for improvement all along the line. We certainly think that wool values will go no lower, and everybody is quite ready for at least a steady, upward move.

An Echo of the Burke and Wills Expedition.

The accompanying photo has been kindly lent to us by Mr. J. C. Warren, of Dylabing, Katanning, W.A., with the following interesting notes:—

"The photo was taken by my late father at Tinga Tingana Station, on the Strzelecki Creek, S.A., in 1892, when Hogarth and Warren took up the run to relieve the drought-stricken cattle country at Strangways Springs. I took 500 head of mixed cattle across, and had charge of the station with about 2000 cattle till the rabbits turned us out in 1895.

"The central figure is 'Boko Joe,' the chief of the Yandrawunda tribe, and on his left 'Old Woman Maggie,' the lubra who nursed King, the survivor of the Burke and Wills expedition. Her daughter stands at his right hand; she was one of our house lubras at Tinga Tingana. The big man on the left, clad only in a sporran, was 'Old Man Jimmie,' a fine old savage, in his prime when the white men first came to the country.



ABORIGINES AT STRZLECKI CREEK, SOUTH AUSTRALIA, IN 1892.

(The old lubra with bandaged eyes nursed King, the survivor of the Burke and Wills expedition.

"When we left Tinga Tingana the Kingston Government stopped the issue of rations, and as there was a very severe drought on, it finished poor old Maggie. Surely she deserved a better end."

Fighting Cattle Tick and Tuberculosis in U.S.A.

That satisfactory progress is being made in eradicating cattle tick in the United States of America is evidenced by figures recently published by the Department of Agriculture. When systematic eradication first began in July 1906 the area infested was shown as being 728,565 square miles. By the end of November last 70 per cent. of that area had been freed of ticks and released from quarantine, leaving only 218,474 square miles infested. This is a wonderful result compared with Australia and New Zealand, where the pest appears to be spreading owing to lack of properly organised effort in suppression. The area released in the States during 1920 amounted to 32,171 square miles.

For the twelve months ending 30th June, 1920, a total of 695,364 cattle were tested for tuberculosis by agents of the U.S. Department of Agriculture. Of these, 28,616, or 4.12 per cent., reacted and were removed. The number of accredited herds at the end of the year was approximately three times as large as on 30th June, 1919. The records also show that, in addition to fully accredited herds, 16,599 other herds, containing 257,577 cattle, had passed the first official test, no reactors being found.

Top Prices for Merino Fleece.

At their last Brisbane Wool Auctions

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Their recent sales also included:—

In Sydney:

Schrader Bros., Walcha, Fleece	...	27½d.
Wiseman Bros., Bundarra, Fleece	...	27½d.
Alex. A. McKay, Guyra, Fleece	...	25½d.
P. L. Belfield, Armidale, Fleece	...	24d.

In Brisbane:

W. J. Chappell, Rockdale, Fleece	...	24½d.
Thos. E. Edmonds, Texas, Fleece	...	22¾d.
Daley & Ennis, Scoured	...	37d.
Daley & Ennis, Scoured	...	35d.

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Size.	Black Varnished.	Galvd.
30 x 4 x 17	£21 0 0	£22 1 6
30 x 4 x 16	—	£26 4 9
30 x 3 x 18	—	£20 15 0
30 x 3 x 17	£24 4 0	£26 14 3
30 x 3 x 16	—	£33 6 0
36 x 4 x 17	£23 4 0	£25 6 0
36 x 4 x 16	£26 0 0	£30 7 9
36 x 3 x 18	—	£23 9 9
36 x 3 x 17	£27 10 0	£30 6 9
36 x 2 x 18	—	£32 5 3
36 x 2 x 17	—	£41 8 0
36 x 4 x 15	£31 10 0	—
36 x 3 x 16	£29 0 0	—
36 x 3 x 15	£34 10 0	—

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Galvanised.		
36 x 1½ x 18B	...	£43 19 0
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36 x 1½ x 17A	...	£62 9 11
42 x 1½ x 17B	...	£57 17 3
42 x 1½ x 17A	...	£60 18 10
42 x 1½ x 17B	...	£68 8 0
42 x 1½ x 17A	...	£72 17 10
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**The Gladstone Meat Works of
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BUYERS OF FAT STOCK FOR EXPORT.

Meat and Produce Trades.

Position and Prospects in Australia.

The Season.

Magnificent rains have fallen over practically the whole of the Commonwealth during the past month. What is more, the weather has been reasonably mild, and feed where short should respond rapidly to the existing moist conditions. Heavy rain at this time of the year is often fraught with danger to young lambs, especially if accompanied by a cold snap, but up to the time of writing the losses have been negligible. Stock generally are in good condition, and the outlook for the season, at all events as far as feed is concerned, is good. What will happen in the matter of prices time alone can prove.

Values for both sheep and cattle were inclined to sag rather badly in the southern States during the second half of May. Forced realisations kept the markets heavily supplied, and graziers were not buying to any extent. However, since the rains the demand has improved, and rates are now pretty nearly back to the level of a month ago. There is a better tone in the markets, and the future seems to be viewed with more confidence.

Fat stock values in North Queensland are largely governed by the meat export trade, and that at the moment is decidedly under the weather. Some two months back the freezing companies were reported to be buying cattle on a basis of 30s. per 100 lbs. over all, to-day the price is said to be under 20s., and buyers not anxious. Needless to say, sellers, too, are not rushing business at that figure, and assumably only those who are obliged to liquidate are disposing of their stock. The Brisbane market is kept firmer by a good local demand, and the fact that cattle from the southern parts of Queensland can easily be sent to Sydney if prices in the home State get too low. At the Enoggera sale of 1st June prime bullock beef realised 28s. to 30s. per 100 lbs., or just about the same as a month previously.

Current Operations.

If any of the Victorian or New South Wales works are treating lambs for export the numbers going through are very small. The local and London markets are such as not to tempt operators, and it is not at all likely that anything worth talking about will be done before the spring.

The position in Queensland is indefinite, and the current meat export season must be proving highly unsatisfactory to all concerned, whether at the producing or shipping end. The latest London advices indicate a continued weak market for frozen beef and mutton. Naturally, there must be a limit to the prices graziers will accept, and, as efforts to reduce costs incidental to exporting have largely failed, it looks as if the killing season would peter out early.

Already Cooke's and the Q.M.E. works on the Brisbane River have closed, it is said, definitely for the season, and others are shutting down intermittently. The A.M.E. Co. (Brisbane), is only operating on small parcels of sheep and cattle, and nothing certain is known concerning the length of their run. Borthwick's are killing about 280 head of cattle per day, and likely to continue for a time. Birt and Co. are putting through 150 cattle daily at Beruda, but will probably have some broken time. According to the last advice the Gladstone Works are treating some 280 cattle per day, and Lake's Creek a little over 200 head. Both of these are likely to continue for some weeks. The Bowen Works are due to open about the middle of June, but it is not known how long they will remain in commission. The Q.M.E. Co. at Ross River, Townsville, are killing 500 head of cattle daily, and expect to close down about the end of June, reopening a couple of months later. The Alligator Creek Works (A.M.E. Co.) are putting through 1000 head of sheep per day alternatively with cattle, and Burdekin 280 cattle daily. They hope to run a time, but, of course, that depends largely on how the market develops.

Clearances of frozen meat from the Commonwealth last month were on a moderate scale, totalling only 20,851 carcasses mutton, 39,667 carcasses lamb, and 188,473 quarters beef for all ports. Of these 16,534 sheep, 37,847 lambs and 180,846 quarters were consigned to British ports, the balance going to ports in the East, Colombo, Port Said, and Honolulu. Probably the output for June will be in about the same volume as May.

Freight Rates.

Exporters have been advised of a further adjustment in rates for the carriage of frozen produce to Great Britain. The charges on meat, as from 1st May, will now be:—Lamb, 2d. per lb.; mutton, 1½d.; beef, 1½d., all plus 5 per cent., which is the same as applies in New Zealand for the current season, and represents a reduction of 5 per cent. on the quotation issued at the beginning of May. It is also announced that the freight on cased meats has been reduced from 120s. to 100s. per ton of 40 c.ft., and on sheepskins from 1½d. to 1¼d. per lb.

While these reductions are most acceptable, it is felt that further and material adjustments must be made to enable the meat trade to carry on. This feeling was expressed in a concrete manner by a deputation of pastoralists, &c., which waited on the Brisbane representatives of the Overseas Shipping Association on 30th May. The object of the delegation was to obtain relief in the form of reduced freights on the products of the industry, and with that in view attention was directed to the wide disparity in the rates charged for certain descriptions of cargo. For instance, it was stated that the charge on greasy wool was £15 3s. 4d. a ton, against £2 10s. a ton for wheat, while the measurement of a ton of dumped wool was 72 ft. and of wheat 50 ft. On scoured wool the charge was £17 3s. 4d., and cotton £6 a ton. Tallow was £8 10s. and copra £6, yet the measurement of tallow was 72 ft. as compared with 80 ft. for a ton of copra. Speaking on behalf of the meat trade, Sir Robert Philp pointed out that they had come to a dead end. He thought that at the close of next month all the works would be shut, and ships would have to go back empty. Present prices would not pay the meat companies to operate, and unless something was done business would have to cease. He added that the only outlet for Queensland in this industry was the export trade, and the shipping companies ought to try to meet requirements by arranging freights at 1¼d. per lb. for beef. When asked if such a reduction would assure a plentiful supply, Sir Robert said he could give a guarantee so far as he was concerned. If the rate was reduced to 1¼d. a tremendous number of cattle would be sent in to the works from North Queensland during July, August and September.

The representations made by the deputation were forwarded to Sydney, where the principal offices of the shipping companies are located, and in due course the following reply was issued:—"Shipowners realise that shippers just now are having a very bad time, but the cause of the depression is not shipping freights, but stagnation in trade. Shipowners are not making excessive profits; indeed, many are not making any profit at all. The position is that if cargo cannot be obtained at the ruling rates, freight vessels will have to be tied up. Further reductions without a corresponding reduction in the cost of running steamship services are impossible. Compared with rates ruling in 1914, freights are high, but if extra running charges are considered, it will be seen that the owners are making profits now much lower than in pre-war days. Shipowners cannot recognise the principle that the rate of freight should be dependent upon the market price of cargo. The rate of freight must always depend upon the cost of shipping the cargo, plus a reasonable profit for the shipowner."

In conclusion, it is stated that, while there is little hope of an immediate reduction, the signs are that there will be a fall in the running expenses of a steamer, and as soon as that fall takes place freights will be correspondingly reduced. With this promise shippers will have to be content for the time being.

Railway Charges.

Earlier in May representatives of the meat trade and pastoral industry waited on the Queensland Commissioner for Railways to ask for reduced railway freights on stock

and meat. It was explained that railway freights since 1914 had been increased from 50 to 80 per cent. They suggested that these should be reduced on stock going to the works and on meat from the works to the jetty.

The request was referred to the Cabinet, and after about a fortnight refused. The Commissioner explained that the present Queensland rates were lower than those of other States, where they had more business and less mileage to maintain. In any case, the refusal was a foregone conclusion after the State Treasurer, Mr. Fihelly, made an official announcement (this was some days before the actual refusal was published) in which he is reported to have likened the deputation to "common mendicants, waiting on the doormat of the Minister for Railways, and importuning him to give them concessions in freight from the department that they were always condemning." Nothing like hitting a man when he is down!

Proposed Licensing of Exporters.

At the annual conference of State Ministers of Agriculture and department experts, held in Adelaide last month, Dr. Cameron, of Victoria, introduced a motion affirming the desirableness of uniform legislation for the licensing of abattoirs and premises used for slaughtering and preparing of meat for export, and for the licensing of meat exporters. He explained that the purpose in view was to combat the American Meat Trust menace. The motion was amended to read: "That it is desirable that legislation should be enacted by the various States for the licensing of meat exporters," and carried.

New Fremantle Works.

The Premier of Western Australia, accompanied by Mr. E. Lee Steere, a director of the West Australian Meat Exports Company Limited, recently visited the new meat works being erected by the company at Fremantle. Subsequently Mr. James Mitchell stated that the buildings should be ready for action in about four months. He described them as magnificent and up to date, and said they would supply a long-standing need at the chief port in the State.

Position and Prospects in New Zealand.

(FROM OUR OWN CORRESPONDENT.)

CHRISTCHURCH, 1st June, 1921.

The frozen meat season is closing earlier than usual, and on the whole it must be considered the most unsatisfactory since the industry was initiated. It opened so promisingly that when the slump came the disappointment was all the keener. Through labour troubles it was late in starting, or more farmers would have got their stock away at the good prices that then ruled. Although the demand and prices for lambs have recovered a little during the past month, and there has also been some business done in light sheep, heavy wethers, ewes and fat cattle have been worth but very low prices for export. Many of the freezing works have already closed down, others are working with reduced staffs, and slaughtermen are returning to Australia in large numbers. A report, dated 23rd May, stated that among the works recently closed down as far as slaughtering is concerned are the following:—Onslow, Feilding, Patea, Petone, Kakariki, Longburn, and Imlay. At Whakatu there have only been five days' killing in a fortnight; at Castlecliff the workers have been reduced from 200 to 60; at Waitara work is irregular; at New Plymouth the conditions are reported to be much the same as at Waitara; at Masterton the staff has been reduced from 281 in April to 194 a week ago, short days being worked in some instances. In Canterbury there is a slackening off, but the conditions in the south are better than in the north. From Auckland it is reported that the position is anything but good. The Westfield works are far from normal; at Southdown, Horotiu, and Whakatane hands are being reduced. It is expected that all the northern works will be closed down by the end of the month.

The New Freight Contract.

At a meeting of the Standing Producers' Committee the final draft of the freight contract between the shipping companies and the freezing companies was considered. The Pro-

ducers' Conference had approved of a contract being signed for this season and next at a rate which would have represented a saving of about £135,000 a year as compared with the present rates. Since then a further reduction has been secured, bringing the total saving to the producers to about £250,000. The standing committee approved of the revised contract, and resolved to advise the freezing companies accordingly.

Cost of Freezing.

Mr. W. J. Polson, president of the Wellington provincial executive of the Farmers' Union, at the annual conference stated with reference to freezing and handling costs that the whole of the difference between the old consolidated charge of about 1½d. and the present rate of 4½d., which comprises the total cost of freezing a pound of meat and sending it to London, is not created by the increased cost of shipping. Producers have to see to it that their own house is put in order. Before the war five-eighths of a penny was the usual charge of freezing f.o.b. To-day it was in many instances almost 1½d.—in other words, there is an increase of 3s. to 5s. per 60-lb. sheep. "Nearly the whole of this increased cost, which represents the difference between re-establishment and bankruptcy to many of the producers of this dominion, is incurred in the increased wages paid to labour."

Imperial Government Meat in Store.

It was officially stated that the mutton, lamb, and boneless beef remaining in the New Zealand stores at the end of April for shipment on account of the Imperial Government amounted to only 28,661 freight carcasses. Shipping space had been allotted for 7628 freight carcasses, leaving 21,033 freight carcasses, all held at Wairoa, Hawkes Bay, for which space had not been allotted. Twenty-three of the freezing works had been cleared altogether of Imperial meat at the end of April. The total payments by the Imperial Supplies Department on meat up to that time had been £53,056,334.

Why Armour's Export License was Refused.

The following telegram has been received by Sir Francis Bell, Acting Prime Minister, from the American Consul-General in New Zealand, dated 27th May:—

"Department State Washington cables instructing me to ascertain the reason for refusal of license to Armour and Co. of Australasia at Christchurch to export, and to point out that American capital established business in accordance with New Zealand laws and that present action appears to be arbitrary and discriminatory."

Sir Francis Bell has replied that New Zealand action in regard to Armour and Co. has been largely influenced by the result of the American inquiry into, and report upon, the dealings of that company in relation to the American Meat Trust. That no difficulty is placed in the way of Armour and Co. exporting to America for American use the meat now in freezing store, but the New Zealand Government has required substantial guarantees against the reshipment of that meat from America to London. That license to export such meat to the London markets is refused. That full warning was given to Armour and Co. and the Meat Trust by the New Zealand Parliament in the year 1918, when it was enacted that every meat exporter must have license to export. It was then made clear that the Act was intended to prevent operations by the Meat Trust. Armour and Co. could not obtain license to export, and devised method of purchasing sheep and freezing them in the works of companies licensed to export. Armour and Co. now ask for license to export this meat because it is theirs in private freezing stores, and they ask for a license now which would not have been granted before the purchases, as they well knew.

London Meat Quotations.

The following quotations have been cabled by the Incorporated Society of Meat Importers:

23rd May, 1921. Mutton: South American, 6¾d., 7d., and 8d. Beef: Argentina, chilled hinds, 9½d.

30th May, 1921. —Lambs: South American, light, 1s. 0½d.; heavy, 11d. Beef: Argentina, chilled hinds, 9½d.

6th June, 1921. —Mutton: New Zealand ewes, 7¼d. Lamb: New season Canterbury, light to medium, 1s. 2d.; heavy, 1s. 1¼d.; second quality, 1s. 1¼d.; Southland, 1s. 2d. Beef: New Zealand forees, 3¾d.; Argentina, frozen forees, 4½d.; chilled forees, 4¾d.; and chilled hinds, 9½d.

American Packers' Profits.

The following brief resume of the accounts of the "big five" for 1920 and 1919, taken from "The Producer," is interesting:—

	1919.		1920.	
	Net Earning.	Surplus Account.	Net Earning.	Surplus Account.
Swift ...	\$2,774,036	\$17,676,380	\$1,034,076	\$16,310,456
Armour ...	2,819,701	16,095,836	1,063,995	16,142,259
Morris ...	140,728	10,645,501	*591,142	12,654,359
Cudahy ...	412,999	1,924,115	124,858	1,024,424
Wilson ...	554,265	4,205,453	*188,170	3,267,140

* Deficit.

† After \$7,400,000 stock dividend.

In every case, except Armour, inroads into surplus account were made to keep up dividend payments, and Armour had to draw on accumulations of "foreign subsidiaries" to maintain disbursements.

The leather concerns connected with the packing houses have also made a very bad showing. For instance, the National Leather Company (Swift) finishes 1920 with a deficit of £1,393,642, wiping out all its surplus and impairing its capital to the tune of £553,000.

New Zealand Frozen Meat Exports to the U.K.

(Season taken as from 1st January to 31st December.)

PERIOD.	Mutton.	Lamb.	Beef.
	Carcases.	Carcases.	Quarters.
Total for 1911 ...	1,792,067	3,326,843	147,154
Total for 1912 ...	2,360,789	3,191,197	149,397
Total for 1913 ...	2,210,648	3,399,119	127,495
Total for 1914 ...	2,771,102	3,644,777	371,604
Total for 1915 ...	2,929,412	3,806,421	326,119
Total for 1916 ...	2,456,115	3,118,317	727,772
Total for 1917 ...	1,964,530	1,550,712	615,867
Total for 1918 ...	1,348,884	1,317,989	537,017
Total for 1919 ...	3,645,704	3,376,168	554,363
Total for 1920 ...	4,676,575	2,031,473	594,546
Monthly Totals, 1920.			
January ...	216,214	119,437	20,016
February ...	256,935	157,578	20,852
March ...	243,434	172,624	16,615
April ...	189,346	157,159	33,389
May ...	337,170	228,274	43,255
June ...	298,874	334,471	45,373
January to June ...	1,541,973	1,109,543	179,491
July* ...	519,521	363,743	102,626
August* ...	177,277	65,391	16,646
September* ...	453,148	155,064	112,958
October* ...	623,075	62,754	82,123
November* ...	598,696	30,854	—
December* ...	762,885	244,124	100,702
July to December ...	3,134,602	921,930	415,055
1921.			
January ...	475,507	5,269	3,179
February ...	330,321	111,267	63,800
March ...	358,933	352,377	106,756
April ...	215,134	367,413	52,983
May ...	315,793	509,771	89,683

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May ...	315,793	509,771	89,683
Clearances reported for May—			
May 2—Waimana ...	25,470	35,736	9,473
" 12—Tainui ...	42,636	56,887	485
" 12—Mahana ...	32,938	90,760	—
" 15—Port Hacking ...	—	34,376	771
" 16—Albion Star ...	34,467	—	62,587
" 23—Admiral Codrington ...	61,555	36,934	14,606
" 25—Remuera ...	53,908	57,166	333
" 26—Port Pirie ...	21,918	116,220	870
" 27—Piako ...	42,901	81,692	558
	315,793	509,771	89,683

* In addition to the above, 279,088 carcasses lamb were shipped to U.S.A. in March, and in April 222,568 carcasses lamb to U.S.A. and 6851 carcasses mutton, 11,875 carcasses lamb to Vancouver, B.C., and in July 20,092 carcasses mutton, 360,493 carcasses lamb to U.S.A. In August 6529 carcasses mutton, 596,987 carcasses lamb to New York, 10,060 carcasses lamb to San Francisco, U.S.A., and 3500 carcasses lamb to Vancouver, B.C. In September 21,317 carcasses mutton, 438,514 carcasses lamb to New York, U.S.A., and 6000 carcasses mutton, 3281 carcasses lamb to Vancouver, B.C. In October 126,914 carcasses mutton, 214,730 carcasses lamb, 593 beef to U.S.A., and 1000 carcasses mutton to Vancouver, B.C. In November 106,426 carcasses mutton, 173,325 carcasses lamb to U.S.A., and 2000 carcasses mutton, 4553 carcasses lamb to Vancouver, B.C. In December 181,913 carcasses mutton, 104,190 carcasses lamb to New York, and 559 carcasses lamb to San Francisco.

Australian Frozen Meat Exports to Ports other than in United Kingdom.

(Season taken as from 1st July to 30th June.)

Period.	Mutton Carcases.	Lamb Carcases.	Beef Quarters.
Season 1911-12 ...	167,120	26,480	197,479
1912-13 ...	166,474	27,313	206,982
1913-14 ...	224,283	33,529	379,353
1914-15 ...	91,725	806	208,827
1915-16 ...	20,814	10,750	34,902
1916-17 ...	15,785	8,025	13,560
1917-18 ...	320	—	4,171
1918-19 ...	33,039	6,950	26,891
1919-20 ...	154,968	41,612	99,869
Monthly Totals, 1920.			
January ...	43,402	14,066	5,202
February ...	26,591	3,501	2,278
March ...	22,800	2,960	8,671
April ...	26,330	2,866	5,452
May ...	2,565	1,032	3,584
June ...	7,567	9,127	4,111
January to June ...	129,255	33,552	29,298
July ...	49,628	2,598	63,707
August ...	6,305	1,085	1,776
September ...	4,609	2,675	8,035
October ...	32,508	1,050	2,307
November ...	6,386	1,370	6,895
December ...	1,820	1,619	3,432
July to December ...	101,256	10,397	86,152
1921.			
January ...	7,053	7,401	6,534
February ...	7,420	2,027	4,942
March ...	11,567	1,590	50,775
April ...	1,854	1,189	6,010
May ...	4,317	1,820	7,627

South American Cable Service.

(FROM OUR OWN CORRESPONDENT.)

SOUTH AMERICAN FROZEN AND CHILLED MEAT EXPORTS.

Period.	Mutton.	Lamb.	Beef Qrs.
Total for 1911 ...	3,048,262	1,092,155	3,807,320
" 1912 ...	2,500,000	815,000	4,030,000
" 1913 ...	1,909,061	671,290	4,477,160
" 1914 ...	1,876,578	805,296	4,375,019
" 1915 ...	921,436	442,132	3,531,842
" 1916 ...	1,190,524	637,160	3,650,000
" 1917 ...	783,250	408,250	2,795,500
" 1918 ...	1,272,717	236,822	6,081,660
" 1919 ...	1,462,366	216,014	5,119,923
" 1920 ...	1,393,923	527,317	4,804,562
Monthly Totals—1920.			
January ...	95,487	7,616	419,810
February ...	124,306	22,836	419,027
March ...	76,952	3,271	473,444
April ...	108,578	69,594	420,881
May ...	25,600	52,000	174,500
June ...	45,000	92,000	375,000
January to June ...	475,923	247,317	2,282,662
July ...	223,000	50,000	432,900
August ...	145,000	27,000	527,000
September ...	182,000	44,000	485,000
October ...	184,000	59,000	466,000
November ...	78,000	18,000	262,000
December ...	106,000	82,000	349,000
July to December ...	918,000	280,000	2,521,900
1921.			
January ...	91,000	64,000	308,000
February ...	120,876	129,266	422,551
March ...	89,500	160,800	425,000
April ...	169,000	186,000	481,000
May ...	347,600	346,000	592,000

A summary of stocks of meat held in cold storage in the United States on 1st March last shows a slight increase during the preceding month of beef, but a considerable decrease in mutton and lamb. Frozen beef at the 1st March stood at 121,123,551 lbs., as against 119,965,064 lbs. on 1st February; mutton and lamb, March, 59,678,721 lbs.; February, 78,081,704 lbs.

Australian Frozen Meat Exports to United Kingdom.

(Only such vessels as have actually cleared the Australian Coast during any given month are included in that month's return.)

Season taken as from 1st July to 30th June each year.	NEW SOUTH WALES.			VICTORIA.			QUEENSLAND. (Including Darwin.)			SOUTH AUSTRALIA, WEST AUST. and TASMANIA.			TOTALS.		
	Mutton.	Lamb.	Beef.	Mutton.	Lamb.	Beef.	Mutton.	Lamb.	Beef.	Mutton.	Lamb.	Beef.	Mutton.	Lamb.	Beef.
1911-12 ..	Carcases. 909,604	Carcases. 271,527	Quarters. 16,741	Carcases. 851,034	Carcases. 1,047,182	Quarters. 4,087	Carcases. 78,549	Carcases. 602	Quarters. 429,731	Carcases. 69,901	Carcases. 131,340	Quarters. 276	Carcases. 1,909,088	Carcases. 1,450,651	Quarters. 450
1912-13 ..	808,188	294,424	8,477	518,855	735,621	9,074	681,957	40,424	1,046,000	82,582	117,901	2,846	2,091,582	1,188,370	1,080
1913-14 ..	1,315,437	403,533	78,195	961,914	1,278,898	115,280	402,486	25,250	1,058,213	18,817	34,216	24,064	2,698,654	1,741,897	1,270
1914-15 ..	1,529,702	552,569	135,730	738,774	1,196,410	130,957	628,176	37,301	1,584,946	35,051	81,233	24,396	2,931,703	1,867,513	1,370
1915-16 ..	291,486	361,843	551	—	47,546	—	263,565	52	903,582	—	—	—	555,051	409,441	904
1916-17 ..	436,943	205,695	54,780	52,927	365,274	20,230	432,571	1,722	1,541,762	—	—	2,622	922,441	572,691	1,610
1917-18 ..	81,776	14,052	7,483	48,783	146,903	—	45,026	10	1,399,836	2,212	952	602	177,797	161,917	1,407
1918-19 ..	278,980	63,694	5,006	656,677	31,023	2,491	59,837	—	687,473	38,067	21,295	—	1,033,561	116,012	694
1919-20 ..	828,413	293,992	21,910	2,251,411	1,526,578	13,559	182,597	1,132	749,998	309,113	95,417	7,162	3,571,534	1,917,119	792
Monthly Tot'ls 1920.															
January ..	39,006	8,798	803	275,375	203,615	—	—	—	—	5,143	—	—	319,524	212,413	—
February ..	65,579	11,861	1,609	355,202	172,179	3,350	—	—	—	38,984	24,818	—	459,785	208,858	4
March ..	18,591	5,058	—	16,351	938	—	—	—	—	10,409	—	—	45,351	5,996	—
April ..	52,771	10,227	319	124,749	47,828	3,822	49,383	22	54,074	—	—	—	226,894	58,077	58
May ..	146,095	28,586	6,758	164,070	35,647	1,029	15,009	—	41,921	50,784	12,426	1,253	375,958	76,659	50
June ..	130,704	30,663	12,144	13,262	730	—	—	—	45,734	—	—	—	143,966	31,393	57
Jan. to June ..	452,746	95,193	21,633	949,000	460,937	8,201	64,392	22	141,729	105,320	37,244	1,253	1,571,458	593,396	172
July ..	21,072	8,531	—	52,112	8,077	—	—	—	34,279	30,757	173	—	103,941	16,781	34
August ..	8,914	2,077	—	33,561	32,088	7,503	793	—	49,216	20,309	4,840	—	63,577	39,005	56
September ..	11,083	12,361	52	167,391	59,451	1,583	—	—	127,163	3,580	477	15,308	182,057	72,289	144
October ..	14,791	325	—	56,140	19,809	1,833	—	—	104,018	4,853	5,539	—	75,784	25,753	105
November ..	25,741	1,100	679	5,826	2,754	52	—	—	—	4,141	864	634	35,708	4,718	1
December ..	1,618	5,933	—	2,100	149,451	—	—	—	58,954	13,850	128	—	17,568	155,512	58
July to Dec.	83,219	30,327	731	317,133	271,710	10,971	793	—	373,930	77,490	12,021	15,942	478,635	314,058	401
1921.															
January ..	9,720	21,717	752	8,851	76,216	—	—	—	58,271	1,345	1,946	—	14,919	99,909	594
February ..	29,365	73,814	6,348	599	35,239	—	—	—	134,320	—	—	106	20,964	109,053	140
March ..	11,988	28,896	4,138	—	—	—	4,028	6,267	39,366	—	—	21,048	19,016	35,163	64
April ..	22,923	23,605	7,061	669	13,892	—	5,000	—	74,191	—	—	—	28,592	37,497	81
May ..	3,775	23,095	6,757	73	7,752	—	12,686	7,000	174,089	—	—	—	16,534	37,847	180
Clearances re-ported, May:															
3 Orvieto ..	—	—	—	—	2,638	—	—	—	—	—	—	—	—	2,638	—
8 Morea ..	—	—	1,000	—	120	—	—	—	—	—	—	—	—	120	1.0
7 Persic ..	123	15,157	5,373	73	216	—	8,136	3,009	14,155	—	—	—	8,352	13,782	19.5
7 Ulysses ..	—	—	—	—	—	—	—	—	13,201	—	—	—	—	—	1.2
13 Cufie ..	2,436	3,644	—	—	—	—	—	—	14,776	—	—	—	2,136	3,644	14.7
15 Wiltshire ..	—	—	—	—	—	—	—	—	58,963	—	—	—	—	—	58.9
20 Runie ..	—	610	384	—	—	—	4,530	3,591	13,590	—	—	—	4,530	4,201	13.9
24 Orsora ..	496	—	—	—	4,778	—	—	—	—	—	—	—	496	4,778	—
31 Euripides ..	720	3,684	—	—	—	—	—	—	5,151	—	—	—	720	3,684	5.1
31 Tropic ..	—	—	—	—	—	—	—	—	13,054	—	—	—	—	—	13.0
31 Westmerth ..	—	—	—	—	—	—	—	—	41,199	—	—	—	—	—	41.1
	3,775	23,035	6,757	73	7,752	—	12,686	7,000	174,089	—	—	—	16,534	37,847	180.8

1921.

TO OTHER PORTS.

May	1—Sonoma—From New South Wales: 2351 quarters beef to Honolulu.
"	1—St. Albans—From Queensland: 116 quarters beef to Manila, and 500 quarters beef to Hongkong.
"	3—Orvieto—From Queensland: 485 quarters beef. From New South Wales: 900 carcasses mutton. All to Colombo.
"	14—Mataram—From New South Wales: 1105 carcasses mutton 7 3 carcasses lamb to Singapore, and 4 carcasses lamb 2 quarters beef to Batavia. From Queensland: 100 quarters beef to Batavia, and 56 carcasses mutton 1121 quarters beef to Singapore.
"	20—Eastern—From New South Wales: 200 quarters beef to Manila and 20 carcasses mutton to Kobe.
"	24—Orsora—From Queensland: 265 quarters beef to Colombo. From New South Wales: 999 carcasses mutton 150 carcasses lamb to Colombo, and 1984 quarters beef to Port Said.
"	24—Taigona—From New South Wales: 237 carcasses mutton, 317 carcasses lamb to Manila, and 1006 carcasses mutton 600 carcasses lamb to Hongkong.

The clearances of frozen meat from the Commonwealth to all overseas ports during May totalled 20,851 carcasses mutton, 39,667 carcasses lamb, 188,473 quarters beef, which compared with the output for April shows an increase of 981 carcasses lamb, 101,211 quarters beef, and a decrease of 9595 carcasses mutton.

When placed beside the total for the corresponding month of last year (May 1920) there is an increase of 133,928 quarters beef and a decrease of 357,672 carcasses mutton, 38,024 carcasses lamb.

An analysis of the various exports for the month under review shows that 16,534 carcasses mutton, 37,847 carcasses lamb, 180,846 quarters beef were consigned to Great Britain, 2854 quarters beef to Honolulu, while ports in the East, &c., take the balance, viz., 1317 carcasses mutton, 1820 carcasses lamb, 4773 quarters beef.

Queensland sent away 12,742 carcasses mutton, 7000 carcasses lamb, 176,676 quarters beef; New South Wales, 8036 carcasses mutton, 24,915 carcasses lamb, 11,797 quarters beef; Victoria, 73 carcasses mutton, 7752 carcasses lamb.

Meat Notes.

The directors of the Sydney Cold Stores Limited have declared an interim dividend of 6d. per share.

New freezing chambers are to be erected at the Biboolah meat works, Cairns district, Q. The necessary timber is now being collected.

The Federal Government last month issued a proclamation revoking the prohibition on the export of meat and butter. The obligation to obtain the written consent of the Minister of Customs before shipping these commodities no longer applies.

Messrs. Vestey Bros. have recently enlarged their meat works at Majunga, on the north-west coast of Madagascar. The killing capacity is now 600 head of cattle per day. The works are absolutely up-to-date, and deep sea vessels can load at the wharf alongside.



COMMONWEALTH OF AUSTRALIA

CENTRAL WOOL COMMITTEE

IMPORTANT NOTICE

TO

Woolgrowers and Others

1. THE COMMONWEALTH OF AUSTRALIA CENTRAL WOOL COMMITTEE, acting for and on behalf of the COMMONWEALTH GOVERNMENT, notifies WOOLGROWERS and OTHERS interested in Wool Appraisements for the SEASON 1916-1917 (in part), and the complete SEASONS 1917-1918 and 1918-1919 and 1919-1920, that a division of assets (recently valued at £22,000,000 and now represented by £10,000,000 of Priority Wool Certificates and £12,000,000 Shares of £1 in the BRITISH AUSTRALIAN WOOL REALISATION ASSOCIATION LIMITED) will take place on or before 31st July next.
2. The CENTRAL WOOL COMMITTEE has been advised that it has been decided by the BRITISH AUSTRALIAN WOOL REALISATION ASSOCIATION LIMITED on or before the 31st July next—
 - (a) to pay 47.5% of the face value of the Priority Wool Certificates, equivalent to a cash payment of £4,750,000; and
 - (b) to retire all Wool interests representing in value for the four Seasons APPRAISED WOOL of £100 and under, on a cash basis.
3. The CENTRAL WOOL COMMITTEE, for the protection of parties interested emphasises the advisableness of payments, dividends, Wool Certificates and Share Certificates wherever practicable being handed directly to those parties.
4. Where it is impracticable for any party interested to directly receive payments, dividends, Priority Wool Certificates or Share Certificates, he may empower an attorney or agent to receive them for him by signing and forwarding to the Central Wool Committee an authority in the Committee's OFFICIAL FORM of AUTHORISATION.
5. OFFICIAL FORMS of AUTHORISATION may be procured from the Central Wool Committee, and no other form of Authority will be accepted or recognised.
6. Signatures to the OFFICIAL FORM of AUTHORISATION should be witnessed by a Justice of the Peace wherever possible, but where this is impracticable the Central Wool Committee will accept signatures witnessed by responsible men such as Clergymen, Doctors, Solicitors, Bankers, Woolbrokers, Schoolmasters or Postmasters.
7. OFFICIAL FORMS OF AUTHORISATION must be properly signed, witnessed and lodged at the office of the Central Wool Committee, 113 William Street, Melbourne, on or before 30th June, 1921, to facilitate the distribution.

J. M. BALFOUR,
Secretary.

J. M. HIGGINS,
Chairman.

Melbourne, 7th June, 1921.

Exports of beef, fresh and frozen, from the United States during February 1921 were only 979,081 lbs., as compared with 13,010,793 lbs. in February 1920. Canned beef exports totalled 1,733,678 lbs. last February, and 733,116 lbs. in the same month of 1920. There was a tremendous falling off in the shipments of bacon and ham, the figures for February 1921 being 47,459,939 lbs., and February 1920 100,108,901 lbs.

A serious strike in the meat packing industry of the United States was narrowly averted in March. The question in dispute was a reduction in wages, and was only settled by means of a compromise after three days' conference between packers and employees. A provisional agreement has been come to for a reduction in pay of eight cents an hour for time workers, and 12½ per cent. for piece workers. The basic eight hour day is retained.

The Colombia Products Company is building meat works at Covenas, at the mouth of the Sinn River, Colombia, which it is expected will be in full operation the end of the current year. A recent estimate places the number of cattle in the country at 8,000,000, with about half a million sheep and goats. The controlling interest in the company is held by the International Products Company, a United States firm, that is also largely connected with certain meat works in South America.

A writer in the "Review of the River Plate" of 18th March says that "two meat carrying boats built in the United States to the order of the Central Products Co., have arrived in the River Plate, and are likely soon to be in Paraguayan waters, where their utility will be put to the test. Some press reports state that these boats will make the direct journey to London with a full cargo of Paraguayan frozen beef, but I hardly think that such a venture would prove a success. The quality of the very best Paraguayan beef would cut a very poor figure on the Smithfield market, where its plain quality would not favour its sale at nearly normal figures for average quality imported frozen beef. Smithfield demands quality and will pay for it, plain quality and 'shadows' experience few buyers, and these at very low figures. Paraguayan cattle are very suitable for canning or 'charque' or sun-drying the meat, but its poor quality and want of finish are against its competing with better quality beef on the home market."

Carnarvon (W.A.) Meat Works.

The Nor'-West Meat Works Limited's buildings, which are illustrated on page 448 are the first fully equipped mutton freezing and canning works completed in the western State. Carnarvon was selected by the company for the location as the natural port and outlet for the large sheep-raising districts of Gascoyne, Murchison, and Ashburton. The actual buildings are on Babbage Island, and are connected with the wharf and town by a short railway. The external structure is of concrete blocks, and the lay out, &c., in full accordance with the requirements of the Commonwealth authorities controlling the meat export trade.

The killing floor has accommodation for 16 butchers, so the slaughtering capacity is at least 1600 sheep per day. Provision is made for freezing 500 carcasses mutton daily, and the capacity of the preserving department, which is very complete and up-to-date, is 1600 carcasses per day. The cold storage chambers are large enough to hold from 25,000 to 30,000 carcasses mutton and lambs.

Power to drive the machinery is obtained from two suction gas engines of 80 b.h.p. and 70 b.h.p. respectively. The refrigerating plant consists of a Linde machine of 35 tons capacity, while two 40 kilowatt electric generators supply the current for lighting and driving several motors. Three steam boilers are installed to provide steam for the by-products plant and preserving and extract departments.

The works were designed and built by Mr. W. Dunkerley, consulting engineer, of Melbourne. The total cost, including levelling the site, construction of railway siding, building quarters for employees, freights and fares from Perth, is said to run to approximately £92,000. The money was raised amongst local sheep breeders, assisted by the State Government in the form of subsidies.

Position and Prospects in Great Britain.

The irregularity of the oversea mails is responsible for the absence of our London Meat Letter from this issue. It was despatched by the "Mauretania" on 29th April, via America, which is considered as quick a route as any other, and her mails have not yet come to hand, though other letters sent away up to 12th May per "Dongola" and "Narkunda" arrived to day, the 13th inst.

A Bit of Old Darling Downs History.

"H.B." writes:—"I see in a recent reference to the death of Mr. Hirst, you mention him as one of the original owners of Pilton. Well it was not until after the middle 50's that his stepfather, the Hon. H. B. Fitz, became the owner, and Mr. Hirst got a portion of it, known afterwards as Hirstvale. Mr. Fitz was manager of Pikedale for Captain Pike, of the Hunter, from the early 40's until certainly 1855. The munificent salary was £50 per annum, so the horse-breaker at 25s. per week, without keep, was better off in those days than the manager.

"Sir Arthur Hodgson had the reputation of being the second to settle on the Darling Downs, and he probably was the first after the Leslies to stock it. Most people, however, said that King and Sibley were the second to take up country, and this is very probable, because the country adjoining that applied for by the Leslies would go next, more especially such as the grand country from the Junction of King's Creek with the Condamine River to above Pilton. The Creek was named after Mr. King, the senior partner, who in 1843 married a sister of the wife of the late Hon. James Taylor, M.L.C.

"They divided the run in two, and that portion mostly to the west of the present railway line to Warwick was called Clifton, and was sold to the two sons of Judge Forbes, who after a few years sold it to the two brothers Gammie (sons of a minister in Aberdeen, Scotland), who in the meantime had taken up Talgai on the west side of the Condamine. That side of the river was never as good as the east, except in patches. King and Sibley sold Pilton, the west side of the line, to Mr. Joshua John Whitting, commonly called "Gentleman Whitting." Nearly everyone had a soubriquet in those days, even many of the working men.

"There was very little cash in those days, and what little there was got into the hands of the publicans. The storekeepers and many of the station owners issued I.O.U.'s, commonly called Calabashes. There was one 'Pub' at Warwick, one at Nanango, known as Goode's, and one in Drayton. The latter was built and kept by William, commonly called 'Bill,' Horton, who used to be stockman at Cecil Plains, and whom Stuart Russell in his *Genesis of Queensland* styled 'The Prince of Stockmen.' His hotel was the regular stopping place for the squatters on their way home to the Downs, and to kill time, as there was little other recreation, they amused themselves by playing cards with Horton when there was no other company. On one occasion Mr. Whitting arrived home at Pilton when the following conversation ensued between him and his overseer, Denny D——, a noted smart man in those days at any kind of work:—"Well, Denny, I am sorry to say I got playing cards with the Fiver (the name by which the landlord was known locally) and lost. I want you to send him in 100 wethers." "All right, Sir, it shall be done." The mail termini in those days were Tamworth, at one end in N.S.W., and the other Goode's Inn on the Burnett, now Nanango, so it was some weeks before Mr. W. received a letter from 'Horton,' couched in the following terms:

"When I played cards with you, Mr. Whitting, I was under the impression that you were a man of honour and a gentleman, and did not think you would play me such a scurvy trick as you have done. Knowing when your shearing was, I valued your wethers at 7s. to 8s., seeing they should carry more than a half fleece, instead of which I have received sheep with skins as bare as glass."

"Mr. Whitting was in a great rage when he opened the letter, and calling the overseer over he handed him the letter, and exclaimed, 'What does the scoundrel mean by addressing such a letter to me?' 'Well, Sir, when you told me to send him the wethers I got them in and shored them myself and the wool is in the shed.' 'That was not right, Denny. It was a debt of honour, and must be paid to the full—send him as many more as will make up the difference.'

"Denny D—— was overseer on our station later in life, and I had the story from himself."

Cattle and Sheep, by "Darley Matheson." (London: C. Arthur Pearson; price, 5s. net.) As a qualified veterinary surgeon the author's best part in the present work is that dealing with diseases and their treatment. Short descriptions are given of the different breeds, which are helped with a number of interesting illustrations, but the chapters on breeds and management are not strong in their appeal to the practical stockowner. A useful book for the small holder.

Stock Marketing in North America.

From official figures appearing at different times it is gathered that the numbers of cattle, sheep and pigs sold at the leading stock yards of Canada and the United States last year was considerably smaller than in 1919. Assumably, the lower range of values ruling, and hard season experienced the winter before last are the main causes for the falling off. The receipts at the eight leading stock yards in Canada were:—

	1919.	1920.
Cattle	1,052,090	896,553
Calves	249,017	247,094
Sheep	598,844	603,941
Pigs	906,244	686,058
Totals	2,806,195	2,433,646

The figures for larger yards in the United States show a much greater drop, but it must be pointed out that they refer to slaughtering, and not receipts. The totals for the nine principal markets are:—

	1919.	1920.
Cattle	5,989,215	4,925,581
Calves	1,418,835	1,317,302
Pigs	18,694,144	15,040,931
Sheep	8,073,852	6,549,471
Totals	34,176,046	27,833,285

Chicago alone, as the largest centre of all, shows a relatively big drop:—

	1919.	1920.
Cattle	2,331,238	1,913,526
Calves	700,668	689,337
Pigs	7,930,634	5,869,592
Sheep	3,934,952	2,803,089
Totals	14,897,492	11,275,544

Applying Electricity to Growing Crops.

The tenth report of the Development Commission of the Research Institute (Great Britain) for the twelve months ended 31st March, 1920, contains interesting details of the experiments carried out in electro-culture during the preceding ten years. The method adopted, states the report, has been to stretch thin wires charged with current above the crop, with the result that a small quantity of electricity passes through the air to the plants below. Workers abroad and in Great Britain claim that by this means yields have been materially increased, but the most striking point about the majority of the earlier experiments is the neglect to measure the current used. On this account one electro-culture experiment could not be compared with another, and there was no certainty whether too much or too little discharge had been given. To test the action of the current and to fill this serious gap in our knowledge there were started a series of plot experiments in different parts of the country, also a series of pot experiments and laboratory experiments with single seedlings.

In all these experiments careful measurements have been made of the current supplied, and special experiments have been directed to the determination of the maximum and minimum current which can be used. The plot and pot experiments have now been continued for a number of years, and converging evidence from the field and from the laboratory indicates very clearly that by such treatment the growth of a cereal crop can be markedly increased. Differences as high as 50, 38 and 35 per cent. in favour of the electrified areas have been observed in a number of cases. It has further been shown that the plants are sensitive to a very small current, so it is easy to give a discharge which reduces, instead of increasing, growth. The amount of electric energy supplied to the individual plant is exceedingly small, for the total energy supplied per acre is only as much as that required for a 50 c.p. lamp.

Preliminary Advertisement

DISPERSAL SALE

OF THE

Famous Lucernedale Stud of Merino Sheep

At Lucernedale, Mount Bryan, South Australia.

On a date to be fixed in OCTOBER, 1921.

ELDER, SMITH & CO. LIMITED,

have received instructions from Messrs. HENRY COLLINS & CO., Lucernedale, Mount Bryan, South Australia, to Sell by Auction, as above, the whole of their famous LUCERNEDALE STUD OF MERINO SHEEP.

FULL PARTICULARS LATER.

Useful Hints.

Preserving Fencing Posts.

Mr. Adam Laidlaw, a Southland (New Zealand) farmer, has found that sheep dip is a valuable preservative of timber. He noticed that a sheep-dip constructed of white pine, one of the least durable of New Zealand timbers in the ground, was quite sound at the end of 25 years. He tried the effect upon fence-droppers, and they are sound after 10 years. He merely cast the dry posts or droppers into the dip (which is invariably left charged after use), and left them in a good time to absorb the fluid, generally comprising oil, arsenic, and sulphur.

Destroying Ant Nests.

Either of the following two simple methods of dealing with ant nests can be recommended. The first is to dissolve two ounces of cyanide of potassium in half a gallon of water and to pour a small quantity down the openings of the nests in the evening, when they are usually inhabited. The second method is to use bisulphide of carbon, employing about two tablespoonfuls for each main opening into the nest. If the openings are then stamped down with clay, the fumes will be sufficient to kill the ants, but the fumes may be fired and the underground chambers of the nest shattered by throwing a wet bag over the openings after the bisulphide has been poured in, then removing the bag in about a couple of minutes (when the fumes are rising) and applying a light at the end of a stick.

Tetanus in Horses.

Writing on the above subject, the Assistant Government Veterinary Surgeon for South Australia says the disease is due to the bacillus tetanus gaining access to the body. The common mode of infection is usually through a wound. The source of infection is usually earth, street manure, or stable manure which contains bacilli and spores. When these gain entrance through a wound tetanus is produced. The entrance of foreign bodies, such as splinters of wood contaminated with soil or dust containing organisms, cobwebs, hay dust, may also prove carriers of infection. Prevention is obvious from the above facts. Do not neglect wounds, especially punctured wounds; also examine for foreign bodies in wounds, afterwards treating with suitable antiseptics, as carbolic acid solution. Pricks in the foot, crupper abrasions, saddle galls are commonly associated with the disease. Treatment, when established, is problematic as to results. Seek for any wounds or injury, and vigorously treat the parts with a strong antiseptic. Keep the patient quiet and in a darkened stable.

Waterproof Concrete.

Last year the Queensland Railway Department carried out experiments with the object of finding a formula for watertight concrete for reinforcing concrete water tanks. The result of these tests have been made public by Mr. J. H. Burgess, B.E., at a lecture delivered in Brisbane some little time back. From his remarks it appears that the introduction of blue metal dust not only renders the mortar and concrete more watertight, but it also increases the strength and prolongs the life of the structure. It was urged that it should be suitable for structures in fresh and sea water, as it fixed the lime produced by the setting of the cement, thus preventing the leaching action of the water and hindering its chemical action. Mr. Burgess gave the main conclusions as follows:—The sand is very important and its composition must be carefully attended to. The cement should be fine, being, of course, the main ingredient. Blue metal dust substituted for portion of the sand decreases the permeability and increases the strength of both mortars and concretes. Seasoning is of prime importance, and the amount of water used should give a mix of wet quaking consistency. The amount of blue metal dust should be equal to one-half that of the cement used, and concrete equivalent to 1.24 mixture by volume can be made watertight for a head of water of 20 feet.

Dingo Trapping.

Mr. A. S. Le Souef, of the Sydney Zoo, in the course of an interesting article in "Science and Industry," gives some useful hints on trapping dingoes. He says that if a dog is found to follow

a certain path in going to and from the feeding grounds, a log can often be found that by long habit he will be jumping carelessly over, and a trap placed on the far side of this will be successful. If there is not one handy, a log can be placed across the track, and although a dog will never jump over anything strange, still he will, when quite familiar with the obstruction, jump over it, and then the trap can be placed in position.

A useful "set" for a track is to place an obvious trap in the centre of the path and two well hidden traps at each side; the dog's attention will be given to the centre object, which he will carefully walk round, and will step into the side traps.

What is known as the "water set" is more useful for foxes than dingoes, but it can be used for them if the water is fairly deep, for a dog will readily walk into shallow water, especially in the hot weather. A lure is placed well out of the dog's reach from the bank of a stream or waterhole, and a trap set under water and covered with moss or debris in such a position that it forms a convenient step to reach the lure.

A dog that is poison and trap shy can sometimes be brought to book by placing strychnined fat on the wool of a sheep's neck and allowing it out where it is likely to be attacked; in the excitement of the chase the dog would not notice the bitterness of the drug until too late.

Selling Stock by Weight.

A resolution was passed at the annual convention of the Graziers' Federal Council to call for a report on the above subject from the State associations. The Graziers' Association of New South Wales accordingly asked Mr. J. B. Cramsie, producers' representative on the Metropolitan Meat Board, to give his views, which may be summed up by saying that the system is undesirable and impracticable under existing Australian conditions. He points out that in Chicago, where stock are sold by weight, the sales take place by private treaty, not by auction. The yard accommodation is extremely large, and the principal part of the cattle have been taught to drink out of troughs, or any other watering utensils, as well as to feed on hay, and it is a customary thing for the cattle to remain for two to four days in the yards awaiting the sale, being fed and watered in such yards during that period. Delivery is being given and taken all through each day, and the stock, in his opinion, are much more evenly fattened, better conditioned, and much quieter than those offered at the Flemington yards.

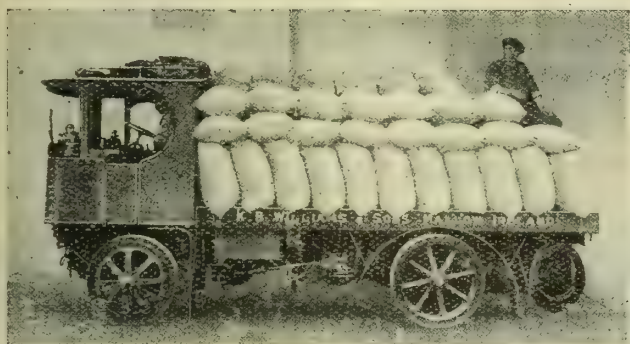
Mr. Cramsie goes on to show how impossible it would be to follow the system with the limited accommodation and mixed lots offered at the different Australian yards. Another point he makes is that in taking the live weight of an animal buyers would have to allow for the difference between that weight and the dressed weight of the carcass, and this would mean it would still be a matter of opinion as regards weight, as it is to-day. According to the condition of every lot of cattle, so would a different percentage of tare have to be deducted, and this would not make the position any better than it is under present conditions.

Mr. Cramsie is convinced that the average buyer is an excellent judge of weight, and amongst the number of buyers present there is always one or two who will give a full allowance for the weight of any cattle, and he cannot see that the producer would gain anything by selling by live weight.

Accompanying the report are two letters, one from Mr. R. M. Pitt, who entirely agrees with what Mr. Cramsie says in the report, and "cannot add a word," and the other from Mr. George Badgery, who says it is impracticable. "It would mean," Mr. Badgery adds, "the revolutionising of the breeding, fattening, market, and selling of cattle, and also transit arrangements. And, even if it were possible, it would mean additional expense to the producer with, in my opinion, very little hope of any improvement in his returns."

British Built "SENTINEL" Steam Waggon

THE LATEST "SENTINEL" STEAM WAGGON IS NOW RECOGNISED IN GREAT BRITAIN AS THE MOST ECONOMICAL MEANS FOR HEAVY and SPEEDY ROAD TRANSPORT.



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6 Ton "Sentinel," 4 Ton Trailer.

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STUD STOCK SUPPLEMENT.



NOTICE TO STUD STOCK ADVERTISERS

As it is our rule to publish "THE PASTORAL REVIEW" on the 16th of the month, it is necessary that all alterations for the Stud Stock Advertisements must be in the printers' hands not later than the 6th of each month.

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WARRAH MERINOS

The Property of
The A.A. Co.

The Warrah Sheep are plain bodied, large framed and carry heavy fleeces.

For particulars apply THE MANAGER, WARRAH STATION, Willow Tree, N.S.W.

CARWELL

MERINOS

- ☞ Pure Murgha
(Wanganella) blood.
- ☞ Large frames, plain bodies,
long staple wool, good
colour, heavy fleeces.
Entirely grass fed and
sound of constitution.
- ☞ The sheep are specially
suitable for South African
conditions.

Stud & flock rams
for sale

SHORTHORNS

- ☞ Founded on Durham Court
blood. The best strains
from Victorian studs since
used.
- ☞ Leading sires now in use:—
Collendina Duke of
Derrimut 11th,
Chocolyn Duke of
Derrimut 61st.
- ☞ Combine constitution with
quality, good doers under
any condition.

Stud & herd bulls
for sale

APPLY

The Manager

CARWELL——GULARGAMBONE——N.S.W.

Telegraphic Address: "Carwell, Quambone, N.S.W."

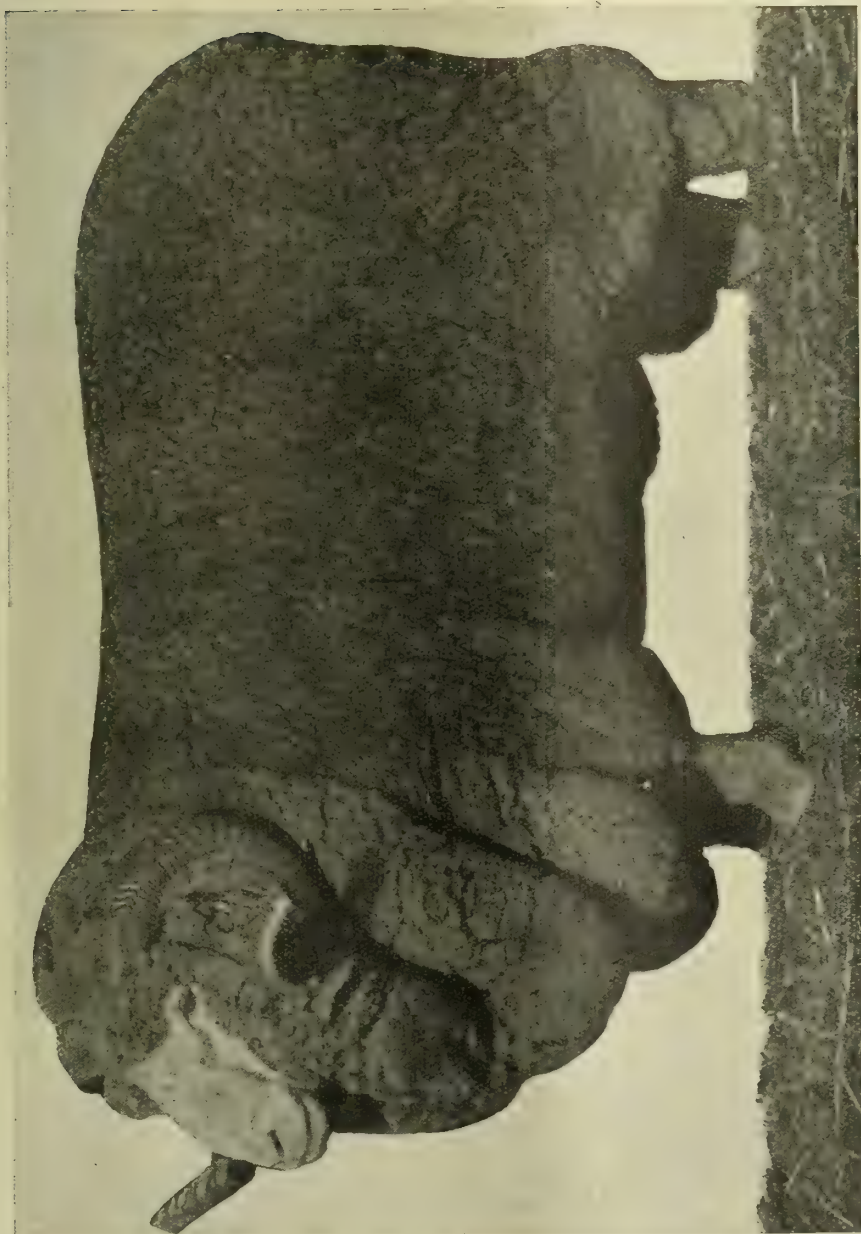
OR

CARWELL STUDS LIMITED

430 Little Collins Street——Melbourne——Vic.

CANOWIE STUD

The Stud was established in 1857. Rambouillet Foundation.



Sires Used
have cut
up to
37 lbs.



Stud Ewes
mated
have cut over
25 lbs.



Don Cronje, an Exhibition Ram (by Cronje). Offering Progeny 1920.

STUD AND FLOCK RAMS FOR SALE.

Flock Rams, 4 & 6 guineas. Selected Flock, 10 guineas. Stud Rams, 25 to 75 guineas. Special Studs from 100 guineas upwards.

For particulars apply—

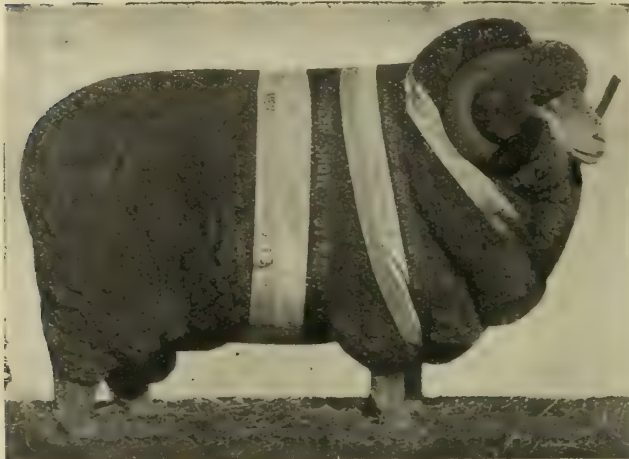
A. G. RYMILL, Managing Director, or A. J. McDonald, Manager, Canowie.

17-18 Pirie Chambers, Adelaide.

Cable—ARTHUR RYMILL, Adelaide.

Hallett, South Australia.

Collinsville Stud



"Dinkum," Aged 2 years and 2 months. Grand Champion Strong Wool Merino Ram (Unhoused) Sheepbreeders' Show, Sydney, July 1920.



"Broad Charles," Grand Champion Merino Ram (Unhoused) at N.S.W. Sheepbreeders' Show, Sydney, July 1919.



3 Champion Ewes. 1½ years (unhoused) Sheepbreeders' Show, Sydney, 1920.
Left to right—Reserve Champion, Grand Champion, Champion Strong Wool



Grand Champion Merino Ewe (Unhoused) at N.S.W. Sheepbreeders' Show, Sydney, July 1919.



Grand Champion Merino Ewe, 1½ years (Unhoused) Sheepbreeders' Show, Sydney, July 1920

WE ARE ALL CHAMPIONS.

Bred by and the property of
JOHN COLLINS & SONS, Collinsville, via Hallett, South Australia.

To whom apply for particulars for Flock and Stud Rams.

Telegrams: Collinsville, Mt. Bryan.

ROSEBANK MERINOS

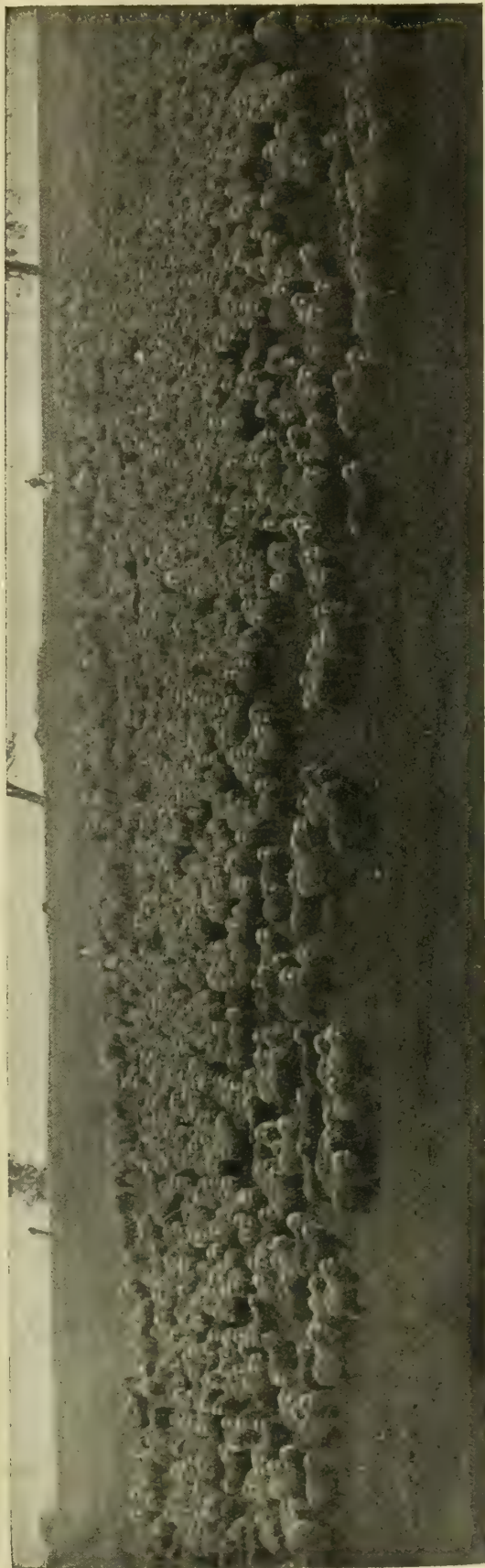
SOUTH AUSTRALIA

*All Melrose Sheep are grazed on
natural pastures only.*



*1½ Year-Old Ewes
Cut 22½, 21, 20, 18½ lbs. of Wool, 1917.
Bred by and the property of G. R. and A. Melrose, "Rosebank," Mt. Pleasant.*

Rosebank secured Champion for Ewe at the Adelaide Royal Show three years in succession, 1910 to 1912. Awarded to different sheep by three different judges. Also secured the whole of the First Prizes offered by the Society for Ewes in 1912.



6,700 Hoggets travelling to shearing shed, 1917. Averaged 11 lbs. 5 ozs. under 12 months' growth.

G. R. & A. MELROSE, "Rosebank," Mount Pleasant, S. Aust.

MOUNT CRAWFORD MURRAY MERINO STUD



CHAMPION RAM LION II.

Grazed at large on Naturalised Grasses only and not Lucerne.
Bred by and the property of ALICK J. MURRAY, Mount Crawford, South Australia.

— THE MURRAY MERINO FLOCK —
was founded by the late JOHN MURRAY in 1843.

MURRAY Merinos have been INBRED for seventy-one years, and are famous throughout Australia, New Zealand, and South Africa for their robust constitution, large symmetrical frames, and heavy fleeces of profitable wool.

FULL PARTICULARS CAN BE OBTAINED FROM—
ALICK J. MURRAY, Mt. Crawford, South Australia.

THE KOONOONA STUD

JUNE 16, 1921.

THE PASTORAL REVIEW.

Large framed,
bold woolled,
grass fed, pure
Australian
Merinos.
Founded in
1863.
Quotations
given for stud,
selected and
flock rams

Apply :—
Koonoona
Proprietors,
Cowra
Chambers,
Adelaide;
or
W. G. HAWKES
Manager,
Koonoona,
Burra, S.A.



Special Stud Ram, "LORD KITCHENER," 3½ Years Old, by "Rajah." Cut 33 lbs. Wool.

THE KOONOONA STUD.

Burra, South Australia.

Rhine Park —and— Cappeedee

MURRAY MERINO STUDS.

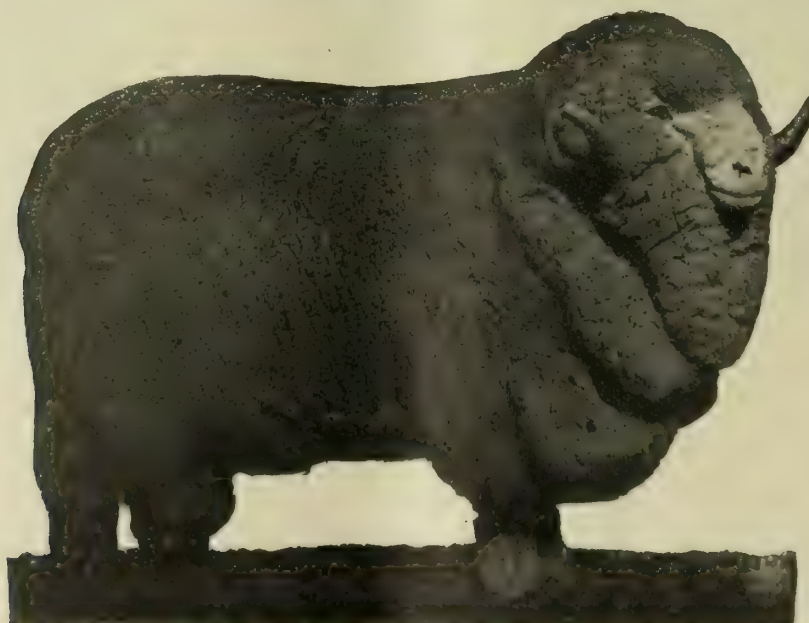


RHINE PARK RAM.

Champion at Adelaide, 1913. 3 years old. Cut fleece 29½ lbs.

THE MURRAY MERINO FLOCK was founded by the late JOHN MURRAY in 1843.

The MURRAY MERINOS have been INBRED for seventy-one years, and are famous throughout Australia, New Zealand, and South Africa for their robust constitution, large symmetrical frames, and heavy fleeces of profitable wool. These Sheep are grazed at large on naturalised grasses only.



2 YEAR OLD CAPPEEDEE STUD RAM, HAIG.

For full particulars apply

MURRAY BROS., Rhine Park, Eden Valley, South Australia
and
WALTER S. MURRAY, Cappeedee, Hallett, South Australia

MUMBLEBONE STUD



Bred on Western
(N.S.W.) Salt
Bush Country.
Noted for their
robust constitution,
large frames, and
splendid fleeces of
long, strong staple.

Established

1879.

Special Stud Ram No. 319.

For particulars sale rams apply—

KATER BROTHERS, Mumblebone, Warren, N.S.W.

H. E. KATER & SON'S EGELABRA STUD, WARREN, N.S.W.



EGELABRA TWO-TOOTH STUD RAM.

The Egelabra Stud is a portion of the Mumblebone Stud, and was acquired by the present owners by the subdivision of Mumblebone in 1906. The stud was founded in 1879 by H. E. and E. H. Kater, who purchased rams and ewes from the late Hon. John Smith, of Gamboola, Molong. Since that date no fresh blood has been introduced into the flock. Mr. Smith was a noted breeder. His flock was founded about 1840 from Marsden's flock of Spanish Merinos and Negrettis, specially imported from Spain. Thus it is claimed that the Egelabra Stud has maintained for 78 years that purity of blood which is so important.

The sheep are noted for large frames, plain bodies, splendid fleeces, long staple, and magnificent constitutions. At a recent shearing the Egelabra sheep, consisting mainly of breeding ewes, cut 14 lbs. 4 ozs. of wool.

For particulars of Sale Rams apply to—

The Manager, Egelabra, Sandy Creek, Warren, N.S.W.

DALKEITH MERINOS

PLAIN BODIED

PURELY GRASS-FED

BOONOK BLOOD

The stud is under the personal supervision of Mr. F. D. McMaster, and was classed by the late Mr. J. C. Darke. The work in the future will be done by Mr. W. J. McCarthy.

Sir Alick, a son of Australia Day, took first prize for ram under 2 years at the Sydney Show, 1919. In 1920 he took Reserve Grand Champion and first prize and was sold to the Welbondongah Pastoral Company for 400 guineas.

Amongst the sires used are Australia Day, Comedy King, General Grant, Young Comedy King, Young Australia, and numerous other high-class Boonoke Stud Rams. Additions made to the stud in 1918 were as follows:—10 Boonoke blood special stud ewes at 110 guineas, which took second prize Sydney Show, 1918, and 1 ditto Grand Champion at same Show at 150 guineas, all purchased from Goldsbrough, Mort & Co. Ltd., Canonbar Station; 10 special stud pure Boonoke ewes at 100 guineas each, from F. S. Falkiner & Sons Ltd.



SIR ALICK

STUD AND FLOCK RAMS FOR SALE.

Trucking Stations—Mudgee, Merriwa, or Craboon. Rams will be delivered on trucks to suit buyer's convenience.

F. D. McMASTER, DALKEITH, CASSILIS, N.S.W.

Boonoke Stud Merino Sheep.

PURE PEPPIN BLOOD.



A leading Boonoke Sire. Photo taken at 6 years old.

Bred by F. S. FALKINER & SONS LTD., Boonoke, Conargo, N.S.W.

Inquiries for Stock should be addressed to—

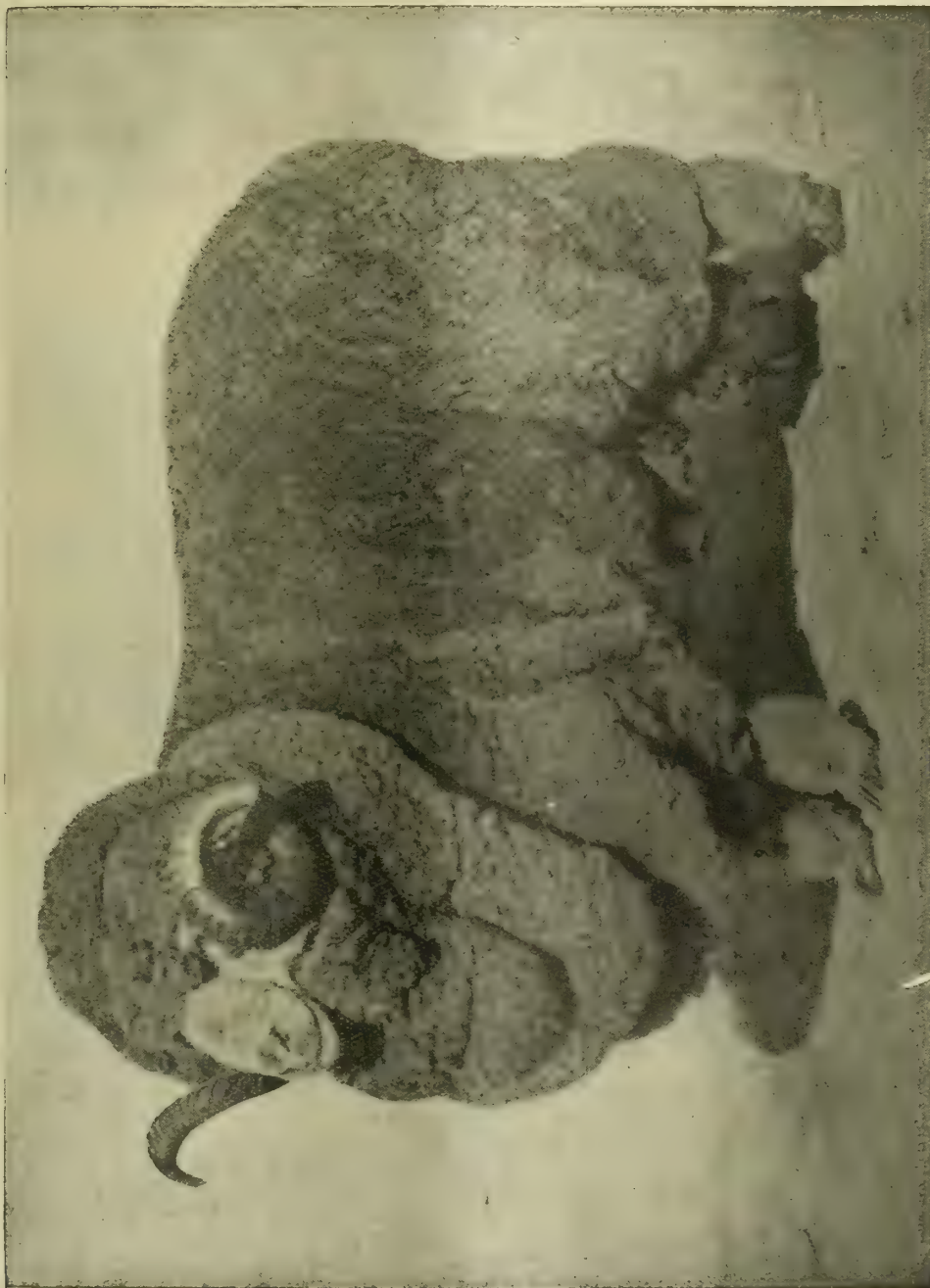
F. S. FALKINER & SONS Ltd., Boonoke, Conargo, N.S.W.
or Boonoke North, Widgeiwa Siding, N.S.W.

THE WILLANDRA STUD

Property of The Willandra Pastoral Co. Ltd.
Pure Wanganella Blood.

The Willandra sheep are bred in a 14" rainfall and are entirely grass fed, possessing strong constitutions, plain bodies, with good heads and necks (which is a distinct advantage where the fly is troublesome), and long

dense fleeces of robust wool. The Willandra sheep produce a fine type of wethers, with exceptionally large frames, plain bodies, well proportioned, and most suitable carcasses for export, while at shearing yield heavy fleeces of attractive wool.



WILLANDRA STUD RAM.

Stud Rams cut up to 35 lbs. Stud Ewes cut up to 25 lbs. Flock and Stud Rams for Sale.

For particulars apply to—**The Manager, Willandra Station, Booligal.**

Telegrams: Hillston. Cable Address: Acumen Sydney, A.B.C. Code, 5th Edition.

Zara Merino Stud



Zara Stud Ram

**Stud
and
Flock
Rams
for
Sale**



Group of Zara Stud Rams

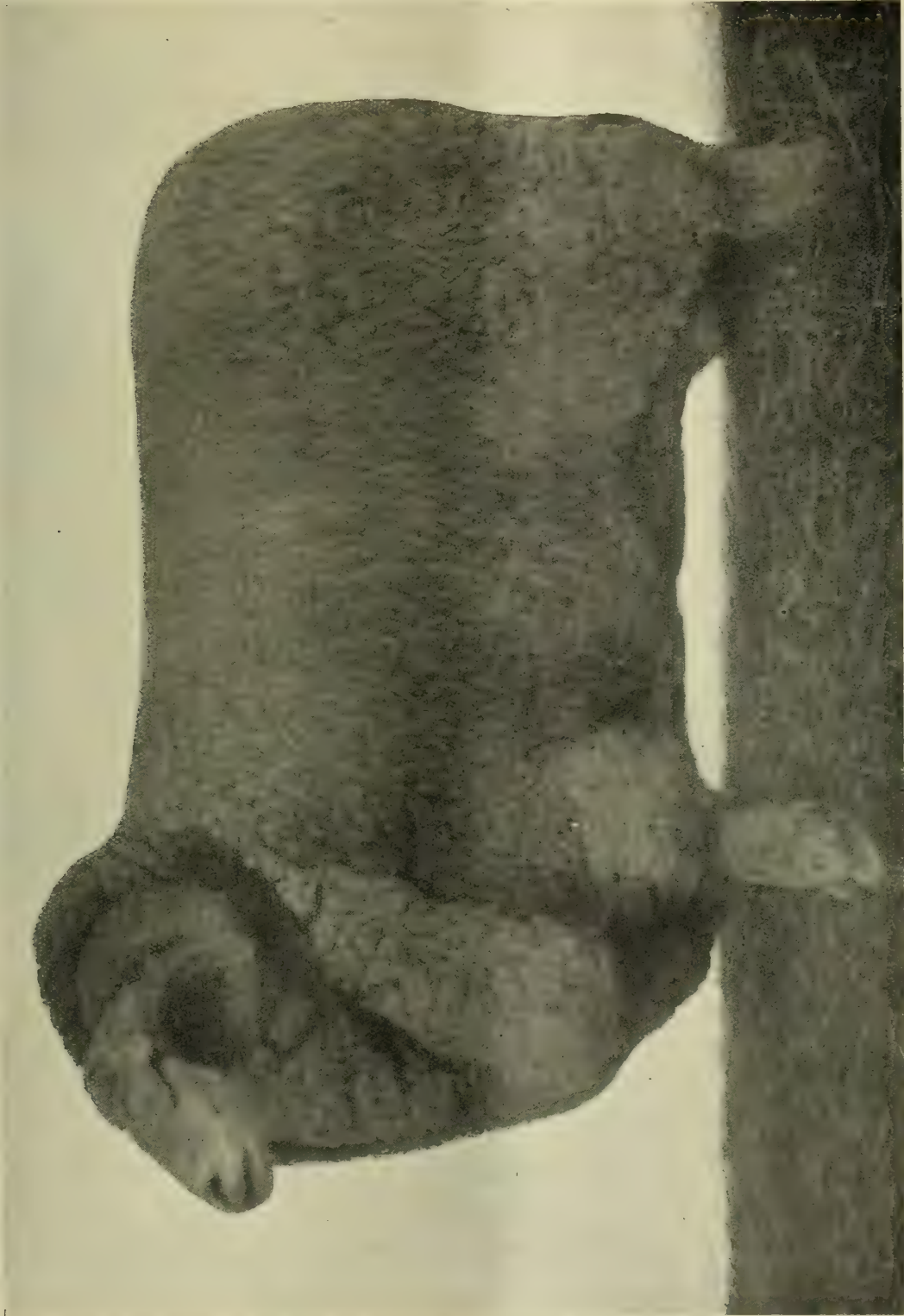
Estate late

WILLIAM OFFICER—ZARA—WANGANELLA

New South Wales

The Wanganella Stud

Stud and Flock Rams for Sale.



Stud and Flock Rams for Sale.

SPECIAL STUD RAM No. 502, 4 years old.

Sold by Austin Wanganella Co. Ltd., with 20 Special Stud Ewes, to A. M. Conroy, Philipstown, Cape Province, South Africa, for 6000 guineas.

For particulars apply :—**AUSTIN WANGANELLA CO. LTD., Wanganella, Deniliquin, N.S.W.**

Deniliquin Stud Park North Stud

(PURE WANGANELLA BLOOD.)

The Property of THOMAS MILLEAR.



"DONALD DINNIE"

Bred and Sold by THOMAS MILLEAR, Deniliquin Stud Park Stud, N.S.W., through Messrs. Herbert Power and Son, to the proprietors of the CANOWIE ESTATE, South Australia. Price, 1200 Guineas.

The above photo was taken at Canowie in 1908.

Since 1906 "Donald Dinnie" has sired 1066 lambs, and an immense sum has been received by the owners for his surplus progeny. His fleece has averaged 32 lbs. for the past 10 years, and now (1915), at 19 years old, he has out 31½ lbs. of bright, lustrous wool.

Among the rams sold have been—"Donald Dinnie" (photo above), in 1906, for 1200 gns.; "Sir William," in 1909, for 1350 gns.; "Stud Park No. 10," in 1918, for 2500 gns., this latter being a world's record for a 6-year-old pure Peppin Rambouillet.

This Stud was formed in 1892 by the father of the present owner (then managing partner in Wanganella), and the classing since 1898 has been done by the owner in conjunction with his Manager, who is now in his 24th year of service.

In June, 1919, Mr. Millear transferred his Deniliquin Stud Park property, with about 4000 stud sheep, being absolutely fair samples in each grade of the 20,000 owned by him, to his son, Thomas Millear, Jun., retaining for himself the property Stud Park North, Jerilderie, N.S.W., which has been worked for many years past in conjunction with Stud Park, Deniliquin. During his son's absence from Australia Mr. Millear will carry on this latter property in the former's interests.

N.B.—The sale of Wanganella Estate by the Exors. of late Thomas Millear (of which Mr. Millear was a Trustee) does not affect the Stud Park North business, as no sheep from Stud Park North were parted with, nor did Mr. Millear acquire any from Wanganella Estate for Stud Park North, excepting prior to the sale of the Estate.

INQUIRIES FOR STOCK SHOULD BE ADDRESSED TO

THOMAS MILLEAR, Edgarley, Willaura, Victoria,

or to the MANAGER, STUD PARK NORTH, JERILDERIE, N.S.W.

VICTORIA DOWNS STUD

MORVEN ————— QUEENSLAND



*A Queensland Stud of
pure Peppin Wanganella blood*



THE VICTORIA DOWNS MERINOS are pure Wanganella blood, being founded on rams purchased from Deniliquin Stud Park and Wanganella Estate, New South Wales, at high prices; the ewes were bought from the former property.



BRED on the downs of Western Queensland, the **VICTORIA DOWNS SHEEP** are noted for their exceptional constitutions and grow a fleece of very dense medium combing wool, of good length and abundant character.

RAMS—Plain bodied, large frames, masculine, bold carriage.

EWES - Plain bodied, large frames, deep, roomy, good breeders.



CATTLE—best blood available—both sires and dams, chiefly Derrimuts, together with a number of imported females—41 pedigree females costing from 100 to 515 gns., averaging 188 gns., and 34 other pedigree cows and heifers, averaging 60 gns. The bull Clifton Cherry Colonel, purchased from A. J. Simpson for 1000 gns., is used in the Victoria Downs Stud. All Cattle Herd Book registered.

Stud and Flock Rams for Sale.

Flock, 4, 6 and 8 gns. Selected, 10 and 12 gns. Stud, from 15 gns. upwards.

Stud and Herd Bulls for Sale.

Young herd bulls from 20 gns. upwards. Young pedigree bulls from 40 gns. upwards.

For full particulars apply to—

LORD BROS., Victoria Downs, Morven, Q'land.

THE BUNDEMAR STUD

Inquiries
for
Stud
and
Flock
Rams
to
The Manager
BUNDEMAR
TRANGIE,
N.S.W.



**BONNIE
CHARLIE**
Sire:
Prince
Charlie
Grand Sire
Lord Charles
6.8 Sire:
Sir Charles

BONNIE CHARLIE.

Bred by Estate late F. E. Body, Bundemar, Trangie, N.S.W. Born Nov. 1st, 1918.
Sold June 16th, 1920, to Messrs. Vermaak Bros., Stockdale, Stormberg Junction, C.P. South Africa, for Three Thousand Six Hundred Guineaes.
Also bred in the Bundemar Stud { Prince Charlie Sold to M. Collins for 3000 guineas in 1918
Lord Charles " H. Collins & Co. for 2000 guineas in 1915
Sir Charles " D. & W. Gibb for £1000 in 1910
2-tooth Ewe, No. C 692 " C. Meyer, Edenburgh, S. Af., for £250 in 1920

HADDON RIG MERINO STUD

Pure Wanganella Rambouillet



Haddon Rig 2-Year-old Ram, "Royal Dandie," sold to A. G. Michaelian for South Africa for 1500 guineas.

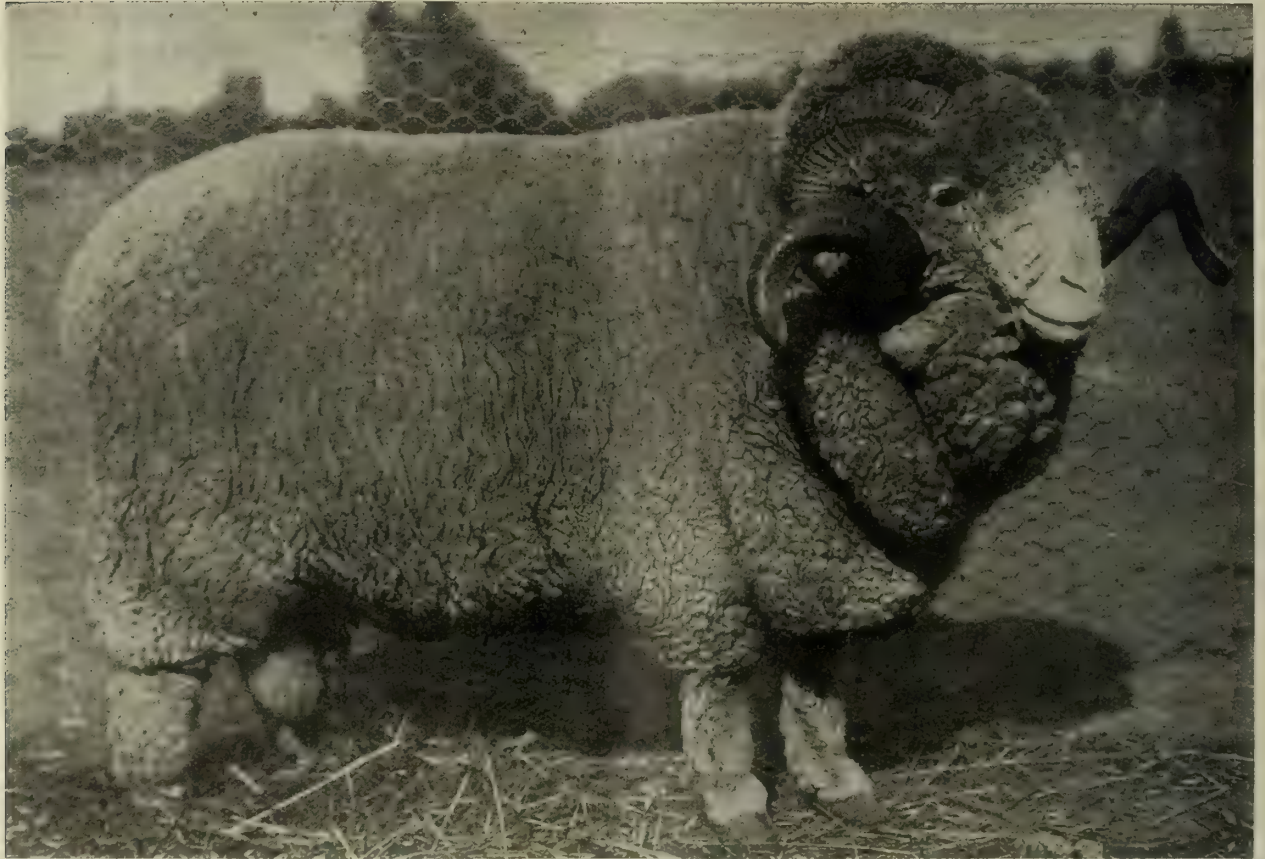
A few rams of "record" quality at "reasonable" prices available each year.

FRANC B. S. FALKINER, Owner, Late Managing Director of F. S. Falkiner & Sons Ltd., 30 years Riverina experience in breeding and active station management.

Inquiries to **HADDON RIG, WARREN, NEW SOUTH WALES.**

WANGANELLA ESTATE STUD

Property of F. S. FALKINER & SONS Ltd.



No. 955.—OPTIMIST. 3 years old.

Sold to Dr. G. E. Goddard for 1750 guineas.

Property of F. S. Falkiner & Sons Ltd., Wanganella Estate, Conargo, N.S.W.

Large frames, plain bodies, robust wool of pronounced character, good length and colour. Numerous letters of appreciation from buyers throughout the Commonwealth and South Africa.

THIS STUD was formed by Messrs. Peppin & Sons in 1861, and purchased with the Station by Messrs. Austin & Millear in 1878. This partnership terminated in 1894—Mr. Millear then taking over his half of the property and stock, which he named **Wanganella Estate**, and conducted till his death in 1895. The Trustees carried on the business until August, 1910, when they sold the property, the whole of the pure bred **WANGANELLA ESTATE** Stud Flock, and the **GOODWILL** of the business to **F. S. FALKINER & SONS LTD.**

FLOCK and STUD RAMS for SALE, for particulars apply—

F.S.FALKINER & SONS LTD., Wanganella Estate, CONARGO, N.S.W.

The UARDRY Stud.

PURE PEPPIN BLOOD.



Group of Seven Rams sold at Auction, Sydney, July 1918, Averaged £319 10/-

Stud and Flock Rams for Sale.

Enquiries should be addressed to:—

Charles Mills (Uardry) Limited, UARDRY, Hay, N.S.W.

Telegrams to "MILLS, Uardry, Carrathool."

EAST BUNGAREE MERINOS

South Australia.



2-year-old Stud Ram 250.

Grazed on natural grasses only.

PURE bred by E. W. Hawker since 1906 from his share of the original Bungaree Stud and Flock, the oldest combing Merino flock in South Australia.

The EAST BUNGAREE sheep are large framed, plain bodied, with splendid constitutions, and are well covered with long robust wool showing plenty of character.

In October 1909 the EAST BUNGAREE wool topped the Adelaide market, and has consistently brought high prices ever since.

In 1917, 18 bales of A A E were appraised at 25½d. ; nine bales of B B E at 24½d. ; 14 bales of A H A E at 23½d.

For particulars of Stud and Flock Rams and Ewes for sale apply to—

EDWARD W. HAWKER, East Bungaree, Clare, South Australia

Or to the Manager.

Telegrams—East Bungaree, Clare, S.A.

Telephone—East Bungaree, Clare, S.A.

BURNIMA MERINO FLOCK

A combination of the famous Murray and Koonoona blood of South Australia. Large-framed, plain-bodied sheep, cutting heavy fleeces of high-class wool. Pure Australian Merinos bred on sound lines. These sheep have given satisfaction wherever used.



4-tooth Stud Rams.—Two of the Leading Sires.

STUD AND FLOCK RAMS FOR SALE.

Apply to the **MANAGER, BURNIMA, BIBBENLUKE, NEW SOUTH WALES.**

THE ANAMA STUD

South Australia.

ANAMA is the central portion of the original Bungaree Run and was taken over by Mr. Walter Hawker with his share of the Bungaree Stud and Flock Merinos at the division in 1906.



GOLIATH.

By Progress ex Lady Togo. Sold to Fagan Bros., N.S.W., for 1500 guineas.

The Anama Merino Flock is noted for producing sheep of great constitution and size, being plain bodied with very valuable fleeces of long combing wool of robust type.

Inquiries for Rams to be addressed to The Manager, Anama, Clare.

Telegrams : Anama, Clare.

Telephone : Clare 4.

Bred by WALTER HAWKER, Anama, Clare, South Australia.

THE BUNGAREE STUD

Stud
and
Flock
Rams
for
Sale

Stud
and
Flock
Rams
for
Sale



BUNGAREE SPECIAL STUD RAM, No. 32.

For particulars apply:—

H. C. & R. M. HAWKER,
Bungaree—Clare—South Australia

NORTH BUNGAREE MERINOS

"NORTH BUNGAREE" is the Northern portion of the original "Bungaree" run, and was taken over by Mr. M. S. Hawker with his share of the Bungaree Stud and general Flock Merinos in 1906.



4-year-old Special Stud Ram, No. 1. The property of M. S. Hawker, North Bungaree.

THE "NORTH BUNGAREE" MERINOS retain all the characteristics of the original "Bungaree" Flock (founded by the late Hon. G. C. Hawker in 1841), viz.: Size, Constitution, Length of Staple and Weight of Fleece.—1917 clip realised up to 25½d., one line of 60 bales making 23½d.

Inquiries for Rams to be addressed to

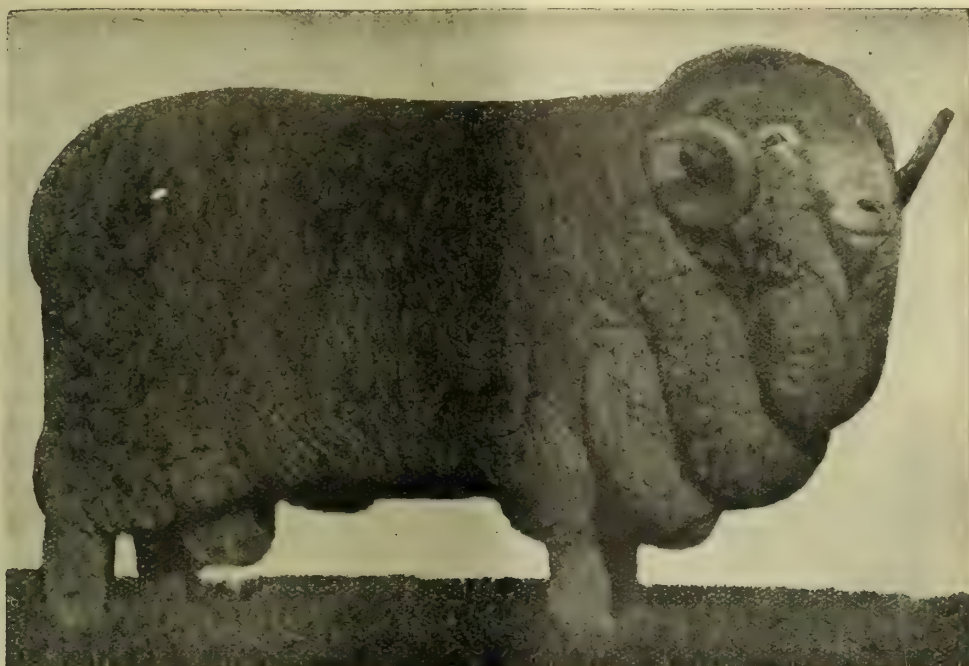
The Manager, North Bungaree, Yacka, Sth. Aust.

Telegrams: North Bungaree, Olare, S.A.

Telephone: Olare, S.A.

SHEAOAK HILLS STUD MERINOS

The property of K. P. P. Sawers.



DAN 5.

These big framed, plain bodied, vigorous constitutioned sheep are grazed on natural grasses only, in a 12½ inch rainfall, and have proved themselves under both adverse and favourable conditions in all parts of the Commonwealth and in South Africa.



WOOLSCOUR 8.

For particulars of Stud and Flock Rams and Ewes, apply to any Live Stock Agents, Adelaide, or to—

Telegrams: Sheaoak, Yarcowie.
Telephone No. 1 Yarcowie

**K. P. P. SAWERS, Sheaoak Hills,
Whyte Yarcowie, South Australia.**

NOW BOOKING.

COBRAN

PURE PEPPIN BLOOD.

DENILQUIN, NEW SOUTH WALES

"COBRAN" for the past 30 years at least has been the premier wool clip of Riverina, and has with very few exceptions topped the market during that period.



COBRAN 4-tooth Ram. Length of staple, 5 inches.

For full particulars apply

**C. H. BESLEY, The Olderfleet, Melbourne, Vic., or
The Manager, COBRAN, Denilquin, N.S.W.**

The "COBRAN" wool is noted for its robustness, great length of staple, excellence of character and high yield; the sheep are big framed, plain bodied, heavy cutters, very even in type, and have been bred on these lines since its inception.

Goolgumbla Stud Merinos

The property of
Mr. GEORGE STUART.

***Pure Peppin strain,
large frames,
strong constitution,
long staple.***

All the ewes in the Goolgumbla Stud are by pure Wanganella, Haddon Rig, and Boonoke rams from ewes of the same blood.

For particulars apply—

**The Manager
GOOLGUMBLA,
Jerilderie,
N.S.W.**



Goolgumbla Stud Ram.

MERRIBEE STUD FLOCK (Late Bull Plain)

MAINLY MURRAY Blood.

Established 24 Years.



Extra Large Frames.

Heavy Fleeces of long, strong, combing Wool.

All MERRIBEE grown sheep averaged 13 lbs. 3 ozs. wool with barely 12 months' growth — Lambs averaging 5½ months old cut 5 lbs. 2 ozs.

ORDERS BOOKED FOR RAMS.

Particulars on Application.

W. W. KILLEN
Merribee, Barellan, N.S.W.

Telegrams—
Barellan (thence Telephone).

WIRRA WIRRA STUD MERINOS

At MT. CRAWFORD, SOUTH AUSTRALIA.



Grazed at large on natural
grasses only.

Bred by and the Property
of MURRAY DAWSON,
Wirra Wirra, S.A.



WIRRA WIRRA, 5½ years old Stud Ram, No. 300.

MURRAY DAWSON, WIRRA WIRRA, Mt. CRAWFORD,
SOUTH AUSTRALIA.

BARRATTA MERINO STUD

Pure Peppin Blood.

Property of
AUSTRALIAN, MERCANTILE, LAND and
FINANCE CO. LTD.

This Stud was commenced by the Company in the year 1893, on another property, by the purchase of high-class stud ewes and rams from Messrs. Austin & Millear, Wanganella, and since then, from time to time, purchases have been made from Wanganella, Wanganella Estate, Stud Park Deniliquin, Murgha, and Haddon Rig.

STUD and FLOCK RAMS FOR SALE.

For particulars apply:—The Manager,
BARRATTA, DENILQUIN

or to



Photo by Amateur.
BARRATTA BRED RAM.—Grand Champion Australian Sheepbreeders' Show, 1917.

AUSTRALIAN, MERCANTILE, LAND & FINANCE CO. LTD.
Sydney—Melbourne—Brisbane

CASSILIS MERINO STUD

The Property of A. BUSBY.



The sheep are large-framed, plain-bodied and carry fleeces of high quality, density and character.

These rams have been very successful in Central Queensland.

The flock has been classed for many years by the late J. C. Darke, and is now being classed by W. J. McCarthy.

Particulars on application from:—



THE MANAGER, CASSILIS STATION, CASSILIS, N.S.W.
or DALGETY & CO. LTD., SYDNEY.

ANLABY MERINO STUD

THE PROPERTY OF H. H. DUTTON

The Anlaby sheep are big framed, plain bodied and hardy

SELECTED & FLOCK RAMS FOR SALE

Apply to

THE MANAGER—ANLABY—KAPUNDA—SOUTH AUSTRALIA

Brucedale & Curranyalpa Merino Stud Flocks

Brucedale Stud, established 1850. Now consists of Peppin blood ewes bred at Curranyalpa, rams in use from Bundemar, Uardry, Boonoke, and Urangeline.

For particulars apply to—

H. C. SUTTOR,
Brucedale, Peel,
New South Wales.



Curranyalpa Stud. Peppin blood from Boonoke, Bundemar, and Wanganella bred rams and ewes. Rams now in use from Lucernedale, Haddon Rig, and Uardry. Big, strong, hardy, plain body sheep, bred on the dry salt bush plains of the Darling for years.

For particulars apply to
CLAUD H. SUTTOR,
"Mia Mia,"
Purlewaugh, via
Coenabarabran.

Special Stud Ram "DANDY," 4 years old.

Bred at Curranyalpa. Cut 31 lbs. wool hand shorn, September, 1920, 12 months' growth.

"LAMARA" STUD MERINOS



STUD RAM No. 28 (2½ years.) Sire, "Lord Charles."

BREEDING.

This Stud is a portion of the "Collinsville" Stud Flock, which has recently been subdivided.



"SILVER CHARLES,"
Sire "Lord Charles" (cost 2000 guineas.)

For further particulars apply to—

H. MELVIN COLLINS

"Lamara," Booborowie, Burra, Sth. Aust.

Wires: "Lamara," Booborowie, S.A.

Telephone: No. 2, Booborowie.

THE

South Wangamong Stud Merino Flock

Property of CHAS. D. SANGER



4-tooth Selected Flock Sale Rams.

Stud Flock founded in 1853. In 1863 ten Wanganella Stud Rams (the pick of their celebrated imported pure Rambouillet sire, Emperor's Get) were successfully introduced. Since then no other strain has been introduced into the Stud.

Average of all grown sheep (75 per cent. lambing ewes), 12 lbs. 13 ozs.

The 1915 Clip sold in Melbourne to 18½d., and Pieces to 15½d. in grease.

" 1916	"	"	"	22½d.,	"	"	19½d.	"	"
" 1917	"	"	"	25½d.,	"	"	21½d.	"	"

For particulars of Flock and Stud Rams apply to—

CHAS. D. SANGER, South Wangamong, Corowa, New South Wales.

"BURRAWANG" MERINOS

Estate late C. Hedley Edols.

The Stud is classed by Mr. W. O'Brien of Mumblebone.



Since 1880 the "BURRAWANG" flock has been maintained solely from Wanganella Blood. During 1918 a high-class Murgha Ram was purchased at a cost of 1000 guineas.

For STUD or FLOCK RAMS

Apply to—The Manager, "Burrawang," Yarrabandai, N.S.W.

or to—The Executors of the late C. H. Edols,

c/o Perpetual Trustee Co. (Limited),

33-39 Hunter Street, Sydney.

MULWALA MERINO STUD

Founded 1863.



Type of selected sale rams bred at Mulwala.

The flock has always been bred on the same lines, under management of James Sloane since 1877.

JAMES SLOANE & SON,

Mulwala Station, Mulwala; or Wood Park, Jerilderie, N.S.W.

THE GUMS MERINOS

Large Frames—Strong Constitutions—Long Staple—Bold Fleeces



Special Stud Ram, 2½ Years Old.



Three 1½ Years Old Stud Ewes. Cut 18, 19 and 20 lbs. Wool respectively.

Founded on Murray, Koonoona and Canowie blood, the Stud is true to the pure South Australian type. Bred on saltbush country and without any pampering the sheep will stand up to the hardest conditions.

The Property of
THOMAS H. PEARSE & SONS,
The Gums—Florietown—S. Aust.

Phone—58 Kooringa

Apply—The Manager, The Gums.

The Springfield Pure Merino Stud

Founded in 1838 by the late W. P. FAITHFULL.
Bred since 1871 by A. LUCIAN FAITHFULL.

Goulburn—New South Wales.



3 Special Stud Sires—Typical Springfield Merinos.

These sheep are noted for their very high cutting value per fleece. Also for their hardy, strong constitutions, doing well in any climate, and growing to a great size.

The A. A. D. Pomeroy wool, bred by A. A. Dalglish from Springfield-bred rams and out of ewes by Springfield-bred rams for **ten** years, **topped** the Sydney market for greasy wool. In 1917, **40** bales realised **29d.** and **44** bales **29½d.**

In **1918**, same A. A. D. Pomeroy wool realised **30d.** per lb.

In **1919**, wool the progeny of Springfield-bred ram, again **topped** Sydney market, viz., **Lerida 30½d.**

The **1920** clips **Pomeroy** and **Lerida** sold to **30½d.** and **29¾d.** respectively. Both are from Springfield blood sheep.



Typical style of Springfield Stud Ewes, bred by A. Lucian Faithfull.
Average weight of Fleeces. 12 months' growth, unhoused. 18 lbs. 4½ ozs

[32]

For further particulars apply to
A. LUCIAN FAITHFULL,
Springfield, GOULBURN, N.S.W.

TELEGRAPH AND TELEPHONE ON.

NALPA STUD MERINOS

E. C. & J. L. STIRLING, South Australia.

The flock is one of the oldest established in the State and a noted prizetaker in both **SHEEP and WOOL.**

NALPA secured all champion prizes for Merino wool as allotted Royal Show, Adelaide, 1914 to 1918. Also first and special prizes for two best rams' fleece, Melbourne Royal, 1919.

STUD AND FLOCK RAMS FOR SALE.

Apply to **Manager, Nalpa, Langhorne's Creek, South Australia**

Telegrams: Fullarton, Wellington, E.



No. 4-1—Double Reserved Champion, Australian Sheep Breeders' Association, Melbourne, 1917. Sold to Geo Seiberhagen, South Africa, for 1000 guineas. Cut fleece 34 lbs.

WYAMBEH CORRIEDALE STUD



WYAMBEH Two-year-old Stud Ram.

The property of

John A. Sloane, Wyambeh, Mulwala, N.S.W., and

John A. Sloane & Co. Ltd., Neyliona, Carrathool, N.S.W.

Flock Founded 1882 by H. J. Corbett. Lincoln Merino Blood only. When exhibited have always proved successful, winning Champion Prizes 1918, 1919, 1920 at the Australian Sheepbreeders' Association Show. Registered Australian Corriedale Sheepbreeders' Association.

Particulars of Rams for Sale apply—

JOHN A. SLOANE, Wyambeh, Mulwala, N.S.W.

THE GUNDARY PLAINS MERINO STUD

The Gundry Plains Stud Ewes were originally purchased from the stud flocks of Messrs. Litchfield, Cooma, and A. Lucian Faithfull of Goulburn. Stud Rams were purchased from the above flocks, and from Boonoke, to mate with the above ewes. The aim of the flock has been to produce a robust, plain-bodied, strong-wool sheep, and they are noted for their heavy fleeces of strong combing wool.

For further particulars apply to—

A. R. MAPLE-BROWN,

Gundry Plains, Goulburn, N.S.W.



STUD RAM JUPITER.

THE CARR'S PLAINS IDEALS

The IDEAL Sheep are finer in the wool than the Crossbred. They have been bred rather towards the Merino, and the fibre is more of the character usually yielded by a Comeback. This accounts for the high price obtainable for the clip, and gives it an unique character. The Carr's Plains Ideals are

AUSTRALIAN BRED SHEEP FIXED TYPES

They cut the same weight of wool as ordinary Merinos and get the same price, but they realise more per head for the whole fleece because they cut much more fleece wool and less skirtings than the Merino; also the carcass is bigger and returns more than Merinos.

For fuller particulars and samples of wool, write to:—

**H. H. WETTENHALL
AND SONS**

Carr's Plains, via Stawell, Vic.

WELLINGTON LODGE STUD South Australia.

Merino Sheep.

Pure bred for 60 years. Founded on Learmonth blood, and later Canowie, Wanganella, and Murray blood.

A few selected and flock 1918 rams for sale.

Shorthorn Cattle.

Pedigree Shorthorns of Angas, Derrimut and imported blood.

A few young bulls and heifers for sale.

Thoroughbred Horses.

Colts and fillies from yearling upwards, by Kerlie and Iownit, usually a few of each for sale.

Apply—

**ALLAN McFARLANE, Wellington Lodge, East Wellington, S.A.
BENNETT & FISHER, Bowman Buildings, Adelaide.**

Mendip Hills Merinos and Halfbreeds

FLOCK ESTABLISHED 50 YEARS.

The Mendip Merinos gained Champion Ram and Ewe at Christchurch Show in 1903-4-5-6, and again in 1915 and 1916. Mendip Halfbreeds have won the "Liston" Cup Competition for Corriedales and Halfbreeds, competing together three times since its inception in 1911.

**Stud
Rams
cut
up to
34 lbs.
Wool.**



**Stud
Ewes
cut
up to
23 lbs.
Wool.**

Part of a Mob of Stud Rams Exported to Argentina at an average of 70 gns.

For particulars apply—

NORMAN RUTHERFORD, Mendip Hills, or G. L. RUTHERFORD, "Connemara," Parnassus, N.Z.

The Eurella and Wairoa Corriedales



The flocks are direct descendants from 800 ewes purchased during 1904-5, and a subsequent purchase from the N.Z. and A. Land Co.'s Corriedales (No. 1 N.Z. Flock Book), established in 1874 and thus the oldest in existence.

Origin Lincoln-Merino and no other blood ever introduced.

All rams used in these flocks have been from the parent flock or bred by owners.

Registered in Australian Corriedale Sheep Breeders' Association
Flocks Nos. 15 & 16.

Following previous successes, at the 1919 Sydney Sheep Show these flocks practically "swept the pool," taking all First, Reserve and Champion Prizes.

Stud and Flock Rams For Sale. Guaranteed to breed true to type.

For particulars
apply to—

**D. MACFARLANE, Eurella Estate, Rylstone, N.S.W., or to
MACFARLANE BROS., Wairoa Estate, Narrabri, N.S.W.**

WILLEROO ROMNEY MARSH STUD

REGISTERED IN THE AUSTRALIAN LONGWOOL SHEEPBREEDERS' ASSOCIATION FLOCK BOOK (FLOCK NO. 29).

The property of PAT. OSBORNE, Willeroo, Tarago, N.S.W.



Willeroo Ram No. 46 of 1915.

1st Prize and Reserve Champion at the Royal Show, 1917, 1st Prize at the N.S.W. Sheepbreeders' Show, 1917, and Grand Champion at the Melbourne Royal Show, 1918.

The Willeroo Rams also made the highest average price at the Sydney Stud Sheep Sales—an average of £56 17s., the highest average for Longwool Sheep in Australia.

THIS Flock was founded in 1910, and now comprises 1100 Stud Ewes. The Ewes purchased for this flock are from the registered flocks of Mr. J. E. Quested, Kent, England; Mr. W. F. Jacob, New Zealand; Mr. G. F. Doyle, Molong, N.S.W., and from the late Mr. James Gibbs' flock, which was all pure Elham blood.

Rams purchased for this Flock from England—in 1915 three from Mr. J. E. Quested, in 1916 two from Mr. Quested, one being the Champion at the Ashford Show and a First Prize Ram at the Royal Show, England; and one in 1916 from L. H. and G. W. Finn—this ram won the Championship for Wool at the Ashford Ram Show in 1916.

Prizes won by this Stud in 1916, 1917, 1918 and 1919 at the Sydney and Melbourne Shows:—7 Grand Championships; 3 Reserve Championships; 38 First Prizes; 26 Second Prizes; 17 Third Prizes; and 3 First Prizes for Wool.

The Willeroo **Romney Marsh Cross** have also won First Prizes four years following, competing against all breeds at the Sydney Sheep Shows, as follows:—

First Prize for Pen of ten Fat Wethers for Export.
First Prize for Pen of ten Fat Wethers, judged on Commercial Value.

First Prize for Pen of ten Fat Wether Lambs, judged on Commercial Value.

Stud and Flock Rams always on Sale. Full Pedigrees of all Stud Sheep are kept.

FOR FURTHER PARTICULARS APPLY TO—

D. A. WHITE, Stud Manager, Willeroo, Tarago, N.S.W.

BOLARO ROMNEYS

Registered Aust. Longwool Sheepbreeders' Association, Flock No. 23.

The PROPERTY of S. M. OSBORNE.

Bred on high country and **grass-fed**. Noted for **great constitution and very heavy, dense fleeces.**

The following prizes were won at the N.S.W. Sheepbreeders' Show, 1919 (the largest show of the breed in Australia):—Champion Ram, Reserve Champion Ram. 1st and 2nd prizes for ram over 2 years, 1st and 3rd prizes for ram over 1 year and under 2 years, 2nd prize for ram under 12 months. Reserve Champion, 1st and 3rd prizes for ewe over 1 year and under 2 years. 1st, 2nd and 3rd prizes for ewe under 12 months old, 1st and 3rd prizes for pen of 2 rams under 12 months old, 1st prize for pen of 2 ewes under 12 months old.

STUD and FLOCK RAMS always
on Sale at reasonable prices.

For further particulars apply—

FRANK FILE, "BOLARO,"
COOMA, N.S.W.



BOLARO No. 15 of 1916.

1st and Champion of N.S.W. Sheepbreeders' Show, 1919.

PENROSE STUDS of Pure Bred LINCOLN & ROMNEY Sheep.

Registered in the Lincoln Sheep Breeders' Association's Flock Book and the N.Z. Romney Association's Flock Book.



RANGATIRA V.

Lincoln Ram bred by Wm. Perry

ANNUAL SALE

is held during 3rd week in
January of each year.

The Romney flock was founded from the flock of Mr. A. Matthews, more particularly through that great sire Premier I., who was the sire of Premier 267. Premier 267 has a very successful show record, only being beaten on one or two occasions and then by his flock mates. His sons have made record prices for N.Z. Romneys.



CHANCELLOR IV.

Romney Ram bred by Wm. Perry.

For particulars
apply to—

Wm. PERRY, Penrose, Masterton, N.Z.

The Sheep which sells to-day is the

Suffolk Sheep

Record after Record at Recent Sales. Demand from all Parts of the British Isles.

Unbeaten
Record
on the Block.



Ideal
Hosiery Wool
—Good 56's.

Ten Two-tooth Ewes sold for £500 (a record for ewes of any breed), Champion Pen Society's Sale. Champions over all Breeds, London Smithfield Show, 1919.

Special Sales at Ipswich July, August and September.

For Full Particulars and Expert Selection apply to:—

THE SECRETARY, SUFFOLK SHEEP SOCIETY, 25 MARLBOROUGH ROAD, IPSWICH, ENGLAND.

Streanshalh Corriedales



WHITE ROCK.
Bred at Streanshalh and winner of five championships and many first prizes.

Registered Flock No. 3.

Founded in 1904 on the importation of 41 pure ewes and one ram from C. H. Ensor's White Rock (N.Z.) Stud, since when only the purest rams have been introduced.

The stud has been very successful at leading shows in Tasmania, while the wool from flocks that have used Streanshalh rams usually commands record prices in the Tasmanian market.

Stud and Flock Rams for Sale.

Apply the owner—

NORMAN NICOLSON,
Streanshalh, Macquarie River, Tasmania.



Grand Champion Corriedale Ram, Sydney, 1920. Purchased subsequently by N. Nicolson.



Oxford Down Yearling Ram. First prize winner at the Cardiff Show of the Royal Agricultural Society of England, 1919.

Oxford Down Sheep

The Oldest Registered Flock.

Individual Pedigree of every sheep. Owned by Hugh Stilgoe, The Grounds, Adderbury, Banbury, Oxfordshire, England. The sheep of the present and the future. Unequalled as a pure breed, or for crossing purposes. They combine beautiful wool, with the best of meat, and will thrive in every part of the world. Many First and Champion prizes. Show Record 1919:—Royal Agricultural Society of England's Show at Cardiff, First and Second Prizes for Yearling Rams, First and Second Prizes for Wool. Birmingham Show, First and Second Prizes for Lambs. London Show, First and Second Prizes and Breed Cup for Lambs.

Telegrams :—"Stilgoe, Adderbury."

THE WHITE ROCK CORRIEDALE STUD FLOCK

THE NEW BREED OF THE NEW CENTURY.

Wool clip equal in value to the best Merino flocks.

Mutton and Lamb the finest quality grown in Canterbury.

Robust constitutions and an up-to-date sheep.

Weight of fleece up to 28 lbs.

Corriedale wool highest price in New Zealand markets.



Corriedale Stud No. 1-18, sold in Sydney July 1920.
Grand Champion Sydney, 1920.

A GREAT COMBINATION OF WOOL AND MUTTON.

Champions International Show, 1906.

Champions, Rams and Ewes, Canterbury Metropolitan Show, 1910.
Champions at Launceston and Hobart Shows, 1910-1911, bred from this flock.

Grand Champion, Sydney, 1920.

Stud Rams and Ewes delivered at any port in the world.

Recent Exportations have been made to all the States in Australia,
South Africa, America, British East Africa, all parts of New Zealand, and other places.

Flock Established 1889 Registered N.Z. Flock Book.



Two Corriedale Stud Rams sold in Sydney
July 1920.

VARIOUS SHOW RECORDS INCLUDE—

PANAMA EXHIBITION, U.S.A. — Champion and Reserve Champion Rams, Champion Ewe. Also other prizes. Gold and silver medals for wool (fleeces).

SYDNEY SHEEP SHOW, N.S.W. — Grand Champion Rams and Ewes 1915. Many other prizes.

BRISBANE EXHIBITION, Queensland. — Champion Rams and Ewes 1915. All other prizes.

NEW ZEALAND SHOWS. — Champion Ram Ashburton Show, also Stringfellow Memorial Cup. Champion Ram Nelson Show. Champion Ewe Rangiora Show. Many prizes Christchurch Show, including the Corriedale Cup for most valuable combination of wool and mutton, single ram, also the Quibell Cup for best average value three rams. Half-breds competed for this also. Different teams of sheep competed at each of these Shows. Practically all were sold 1915. Reserve Champion and other prizes. Christchurch, 1919.

PROGRESS.

The greatest invention in modern Sheep Farming is the Freezing Industry. The Freezer opens to the Sheep Farmer the Meat Market of the whole world. Before only Wool could reach the World's Markets.

PROGRESS.

To-day it is most profitable to grow sheep which combine the wool value of the Merino and the meat value of the British Breeds.

THE CORRIEDALE REPRESENTS PROGRESS.

FLOCK AND STUD RAMS FOR SALE.

For Particulars apply to

C. H. ENSOR, White Rock, Rangiora, N.Z.

OR TO YOUR AGENTS.

Note the bold appearance,
denoting constitution



Note the evenness of type
these sheep show.



BUSHEY PARK CORRIEDALES

(Registered).

Foundation: Lincoln—Merino.

This flock was founded by the purchase of over 1000 specially selected studs at the dispersal of Mr. Leonard White's famous flock (No. 9, N.Z.F.B.)

CONSTITUTION.

Note the shape of these sheep. They have robust constitution and large symmetrical frames, as well as heavy fleeces.

WOOL.

The wool is a dense, shafty, true halfbred, and is noted for its excellence of character and length of staple.



PREPOTENCY.

Having been carefully line-bred for many generations, the whole flock shows a strong family likeness and fixity of type. The rams are consequently extremely prepotent, having the power of impressing their characteristics on their progeny.

SHOW YARD RECORD.

The Canterbury Agricultural and Pastoral Show, held annually in Christchurch, is the "Mecca" for Corriedale sheep in New Zealand. For many years Mr. White's sheep have been great prize takers. His latest achievement was the winning of the Championship Gold Medal for Ram, and the Corriedale Cup for most points in rams in 1919.



STUD & FLOCK RAMS FOR SALE.

For particulars apply to

WRIGHT, STEPHENSON & CO. LTD., Stud Stock Salesmen. P.O. Box 462. Dunedin, N.Z.

or The Proprietor,

J. A. JOHNSTONE, Bushey Park, Palmerston South, N.Z.

TEVIOTDALE REGISTERED CORRIEDALES

The Drought Resisting Breed

These Sheep have been bred on the Teviotdale Estate for 38 years, and are the heaviest clipping Corriedales in the Dominion.



TEVIOTDALE CHAMPION RAM.

They are guaranteed to breed Absolutely True to Type.

They have been under the charge of the originator since the inception of the flock

Experience with these sheep during the recent drought at Tocal Station in Western Queensland, proves them to be ALL BUT DROUGHT RESISTING.

Where Merinos died, THE CORRIEDALES SURVIVED.

The recent successes of this flock comprise:—

At the Panama Pacific Exhibition

Reserve Champion Ewe

First and Second Prizes for Ram Lamb. First and Second Prizes for aged Ewes. First, Second, and Third for Yearling Ewes. Second for Yearling Ram. (No aged ram from this flock was exhibited.)

Corriedale Wool is the best for Khaki

In the wool section at the Panama Exhibition, Teviotdale wool was the admiration of all experts, and secured the following awards: 1 gold medal, 2 silver medals, 1 bronze medal.

There is no doubt that the Corriedale is the future general purpose sheep for highest quality of wool and mutton.

At the scouring competition last November Teviotdale sheep again gained first place for heaviest fleece.

Rams and Ewes for sale in quantities

G. D. GREENWOOD (Originator of the Breed), Teviotdale, Amberley, New Zealand

"The two most profitable general utility breeds."

Corriedale Sheep

for constitution, carcase, big lambings and bulky fleeces of even type and high value.

The Corriedale Park Stud, Wagga Wagga, New South Wales (Australian Corriedale Breeders' Association Flock No. 1), founded in 1882 by mating Stud Merino rams and Stud Lincoln ewes, inbred ever since, an outcross obtained by the introduction of the very highest grade of Stud rams, mainly from the N. Z. and Australian Land Company's

Moeraki Stud, New Zealand (founded in 1874).

Sheep from the Corriedale Park Stud have taken over 100 first and 20 Champion Prizes at Australian Sheepbreeders' (Victoria), N.S.W. Sheepbreeders' (Sydney), Melbourne Royal, Wagga Wagga, Albury, and Hamilton Shows.

RAMS cut from 15 to 25 lbs. wool. EWES cut from 10 to 15 lbs. wool. Pen Pure Corriedale Wethers sold in Melbourne Sale Yards at £5 per head. Wool grown in Riverina appraised Geelong, 1917, at 23½d per lb.

NOTE.—Inspection of original letters from purchasers from all over Australia, also U.S.A., Canada, and Japan invited.

It pays to have the best.

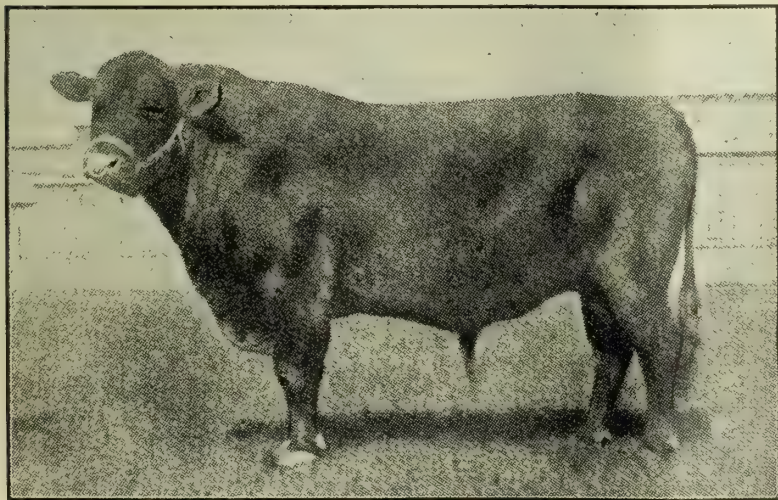


Corriedale Rams, Ewes, Lambs, and Wethers.

Bred by, and the property of, J. F. GUTHRIE, Corriedale Park, Wagga Wagga, N.S.W.

300 Pure Rams (Poleys) of 1920 drop, for delivery at from 4 guineas upwards.

RED POLLED CATTLE



The most prepotent breed — splendid milkers, ready fatteners to heavy weights.

The Stud at Corriedale Park was secured from Mr. Ben Osborne, of Redbank, Harden, New South Wales —all imported or descended from high-class imported cattle.

The young stock are by **RENDELSHAM ELECTOR** (imp.)

Sire now in use **FLIGHT COMMANDER** by **BELLIGERENT** (imp.) — Dam, the famous cow, **BIRDSEYE**.

Pedigreed bulls for sale at from 30 guineas upwards.

Prices reduced on account lower values Wool, Mutton, Beef.

FLIGHT COMMANDER, by Belligerent (imp.) ex Birdseye. Champion Red Polled Bull, Royal Show, Melbourne, 1920.

WONDERFUL MILKING RECORDS.

APPLY J. F. GUTHRIE, Geelong, Vic.,

OR ANY AUSTRALIAN STOCK AGENTS

The N.Z. & A.L. Co.'s Corriedales



2-Shear Ram.

Champion at Christchurch, Nov., 1920, and at Dunedin, Feb., 1921.

The Company's flocks are No. 1 and No. 2 in the New Zealand Flock Book, and are the oldest in existence. Show-yard successes during the past 10 years have been very numerous, and include in that time 10 Championships at Christchurch, the premier show for the breed in New Zealand.

The New Zealand and Australian Land Company's New Zealand Corriedale Flock originated at the Levels Estate in Canterbury in 1874, when Mr. W. S. Davidson, the present General Manager, put 1000 specially selected Merino Ewes to Lincoln Rams, and their progeny, kept absolutely pure, now number over 6000 Ewes. The Flock was kept at The Levels until that property was resumed by Government in 1904, when part of the Corriedales was sent to Hakatarama, in Canterbury, and the remainder to Moeraki, in Otago, since which the purity has been strictly maintained.



Prize Winning Ewe Hogget.

STUD and FLOCK RAMS FOR SALE.

APPLY TO THE

New Zealand and Australian Land Co. Ltd., DUNEDIN.

The Rakahuri Corriedale Flock



Champion Corriedale Ram, Rangiora, 1915.

Bred by Hugh Ensor.

One of the best quality and heaviest woolled flocks in New Zealand.

Established the record price of **19½d.** for Corriedale Greasy Fleece Wool at the Christchurch sales, Nov. 11th, 1915.

For shape and constitution the Rakahuri sheep cannot be surpassed. Winners of many prizes. Flock established 1889. Registered N.Z. Flock Book.

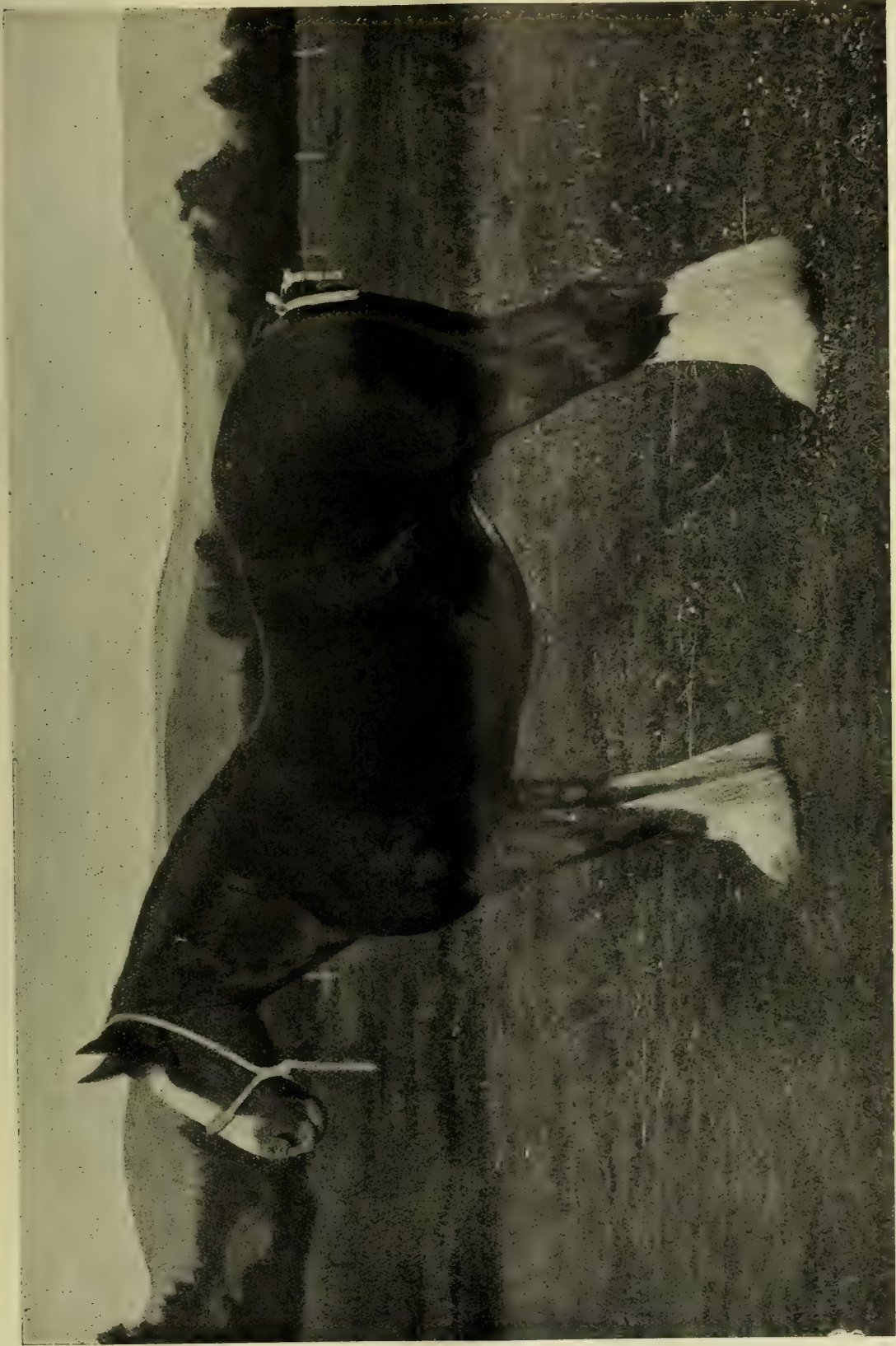
STUD and FLOCK RAMS FOR SALE.

For full particulars apply to—

DALGETY & CO. LTD.

or HUGH ENSOR, Rakahuri, Rangiora, Canterbury, New Zealand.

THOMSON'S WAI-RONGOA STUD, N.Z.



BARON'S BRILLIANT (Imp.).

Govt. Vet.'s LIFE CERTIFICATE, 12 years of age, nursing a foal. 37 Championships and 71 First Prizes in Scotland and New Zealand.

First Annual Sale of 50 Imported Clydesdales early in 1922. Look for fresh information in next issue. No Reserve.

PEDIGREE DRAUGHT HORSES

The Widgiewa Stud,

NEW SOUTH WALES,

The Property of
F. S. FALKINER & SONS LTD.,

is the largest stud of pedigree draught horses in the Commonwealth.

The mares have been carefully selected without regard to cost, and special attention has been paid to their soundness and breeding.

The imported sires **The Admiral** (Imp.) and **Federation** (Imp.) have been used in the stud. **Baron Belmont** was imported from Scotland in June, 1911, to replace **The Admiral**



WIDGIEWA ROSEMONT.—3-YEAR-OLD
3-YEAR-OLD CLYDESDALE STALLION
Bred by F. S. Falkiner & Sons Ltd.
Sire, **BARON BELMONT** (Imp.) (C.S.B. 13973.)
Dam, **ROSEBUD**, by Lord Dundonald (Imp.)

**A Number of Colts and Fillies
are always For Sale.**

F. S. FALKINER & SONS Ltd., Boonoke North, Widgiewa Siding, N.S.W.

A limited number of approved mares taken to Widgiewa stallions.

GROONGAL STUD, N.S.W.

The property of R. S. FALKINER.

English Leicesters Shorthorns.

For particulars apply—
The Manager.

Telegrams: GROONGAL, CARRATHOOL. Postal: GROONGAL, S.W. RAILWAY, N.S.W.

BAROONA SUFFOLK PUNCHES

Known all over Australia.

Colts rising 3 years for sale.

Apply:—The Manager, BAROONA, WHITTINGHAM, N.S.W.



BAWDEY VOLUNTEER.
Bred by Sir Outhbert Quilter, Bart., M.P.
Champion Royal Sydney Show, 1921.



DEVON CATTLE

Having regard to the great increase in the size of these Cattle their marvellous constitution, beef producing and improved milking qualities, they have become the best ranching cattle and most suitable for export.

Shows and Sales of Devon Bulls are held by the Society in February and October annually

For all particulars and Herd Book, and for Register of Animals for sale, price 2/-, apply to the Secretary of the Devon Cattle Breeders' Society—

JOHN RISDON, Wivellscombe, Somerset
ENGLAND.

The Cannobie Lea Aberdeen-Angus Herd

Founded from one of the best strains and noted for constitution.

Orders can now be booked for Calves (Period 1920).

Inspection Invited. Homestead situated 5 miles from Palmerston North.

J. F. KNIGHT, Newbury, Palmerston North, N.Z.

AKITIO ABERDEEN ANGUS STUD

Founded on stock purchased from
Messrs. Handyside, Roberts & Coy.

A bull calf was recently imported from Scotland at
a cost of one thousand guineas.

F. ARMSTRONG,
Akitio, N.Z.



MOOSE II (imp.), 5 years.

The Gwavas Herd of Aberdeen-Angus Cattle

NEW ZEALAND

The Property of Mr. A. S. G. Carlyon.



Stud Bull Quality of Maisemore (imp.)

ADDRESS:

The Manager, Gwavas Station,
Tikokino, Hawkes Bay, N.Z.

Telephone and Railway: Waipawa.

This herd, which is noted for good constitution and freedom from disease, has lately been improved by importations from the herds of Lord Rosebery; Kerr of Harviestoun; Kennedy of Doonholm; Cridlan of Maisemore Park, Gloucester; and Elliott of Duns.



Stud Cow, Pure Pride of Dalmeny (imp.)

EAST TALGAI ABERDEEN ANGUS STUD

strong, Akitie, N.Z., and Proud Peer of Tolarno, bred by the late W. C. Grubb, of Tasmania, cows with a fine lot of heifers coming on. Numerous prizes have been taken at the Brisbane Exhibition and other Shows in Queensland.



"DUKE OF GORDON OF TALGAI." 2 years, 2 months old.
"BLACK JUNO." 12 months. Both by Bonnie Dundee (imp.)
dam Minerva (imp.).

The East Talgai Aberdeen Angus Stud was formed some years ago by the importation of 8 high-class cows and a bull from the leading studs in New Zealand. In 1917 the whole of the Boolarwell, Queensland, stud of pure cows was purchased and since then two high-class stud bulls have been secured at high figures, viz., Mahoe of Akitie, bred by F. Arm-both of which are now in use in the stud. The herd at present consists of about 70 breeding



MAHOE OF AKITIO (imp.), 23 months old. Now in use in stud.

The 1919 drop of bull calves will be ready for Sale towards the end of this year.

Apply **GEORGE C. CLARK**, East Talgai, Elinthorp, Queensland.

GUNYAN HEREFORD STUD HERD.

STUD & HERD BULLS FOR SALE

All Females are eligible for Entry in A.H.H.B.

Stud Bulls in use at present—

Magnitude (imp.), winner Championship, Brisbane, 1918, Rosador 2nd (First Prize, Sydney), Wonder 3rd (First Prize, Sydney), Sir Edgar (First Prize, Sydney), Lord Lyndley (First Prize, Brisbane).

Apply to

TINDAL & SON, Gunyan, Texas,
via Inglewood, Queensland.



MAGNITUDE (imp.)

LYNDLEY HEREFORDS

Founded on Reynolds, Beattie & Imported Stock.

All herd bulls are pure bred, only Stud Book bulls and cows used.

Lyndley Herefords exhibited since 1913 on 7 occasions and have won 8 Championships, 11 Reserve Championships, 58 firsts and 35 seconds, and hold the Australasian record price 1125 gns.

Stud bulls and heifers for sale. Also pure herd bulls.

Inspection Invited.

Apply **JAMES SPARKES, LYNDLEY, JANDOWAE, QUEENSLAND**



MANSEL BANNER PRINCE (imp.) 37,337 E.H.B. Age 1 year 3 months.
Now used in Lyndley Stud.

"Indiana"

Stud Bull Calf by

"President Wilson"

(Imp.)

Age when photographed
24 weeks and 5 days.



Bushy Park Stud of HEREFORD CATTLE

This Herd is now composed of a small but very select group of magnificent Cattle, every individual in which is first-class. In fact, it may safely be said without the slightest exaggeration that in no part of the world could they be excelled.

Possessing as they do the great advantage of being reared under natural conditions, absolutely without housing or forcing—even those which are being prepared for Showing being left out at night—it will readily be seen how valuable they must be for breeding good sound-constituted stock. None but long-pedigreed animals are kept in this Herd.

Efforts are now being made to secure shipping for stud stock from New Zealand to South America, which will no doubt be arranged within the next year or so, and it behoves all Hereford breeders to place themselves in a position to take advantage of this great market.

There are now available for private sale at Bushy Park the following high-class Bulls at very reasonable prices:—

Two two-year-old Stud Bulls by "Rufus" (imp.)

A grand selection of Stud Yearling Bulls by "Rufus" (imp.): "Elect 19th," "Maymorn" and "Count Rufus."

The 1920 calves by "President Wilson" (imp.) are a magnificent lot—the best that have ever been at Bushy Park, both bull and heifer calves being equally good.

Anyone desiring to secure a bull calf by "President Wilson" (imp.) should apply early.

There is also a splendid lot of two-year-old Run Bulls and a few Run Yearlings, all of which have been handled and tied up.

For particulars apply :

FRANK MOORE

BUSHY PARK, KAI IWI
WANGANUI, NEW ZEALAND.





LADY PRESIDENT 8th
2 weeks old.

LADY PRESIDENT 4th.
3 years 11 months old. Weighed 1615 lbs.
at Aug. 1918 Brisbane National with Lady
President 7th as calf at foot and she took
1st prize then as cow 2 yrs. and under 3 yrs.

ISIS 2nd.
1 year 8 months old.

LADY PRESIDENT 7th.
1 year 1 week old.



9-month-old Bull Calves

High-class Stud and
Herd Bulls for sale.

All females and bulls
used in the herd are
entered in the Herd
Book.

Herd established near-
ly 50 years.



9-month-old Bull Calves.

CRESSBROOK HEREFORDS Apply to—

EDGAR C. McCONNEL,
Cressbrook, Toogoolawah, Q.

BELLE VUE HEREFORDS.

The Estate of the late JAMES GIBSON, BELLE VUE, EPPING, Tasmania.



ROSADOR.

Bred by Henry Beattie & Sons, Vic. Sired by Royal Duke,
dam, Lady Roseberry 2nd. Purchased by the Trustees James
Gibson Estate in 1908.



BELLE VUE ROSADOR 4th.

Three years old. Bred by Trustees James Gibson Estate. Sired
by Rosador, dam, Lady Betty. Was Champion Hereford Bull at
the principal Tasmanian Shows in 1918 and 1919.

BELLE VUE MERINOS

Belle Vue is the home of the famous Sir Thomas flock All Belle Vue sheep
are descended from Sir Thomas and the same original lot of pure ewes.

FOR PARTICULARS APPLY—

THOMAS MUIRHEAD, The Manager, BELLE VUE, EPPING, Tasmania.

The MICALAGO Stud

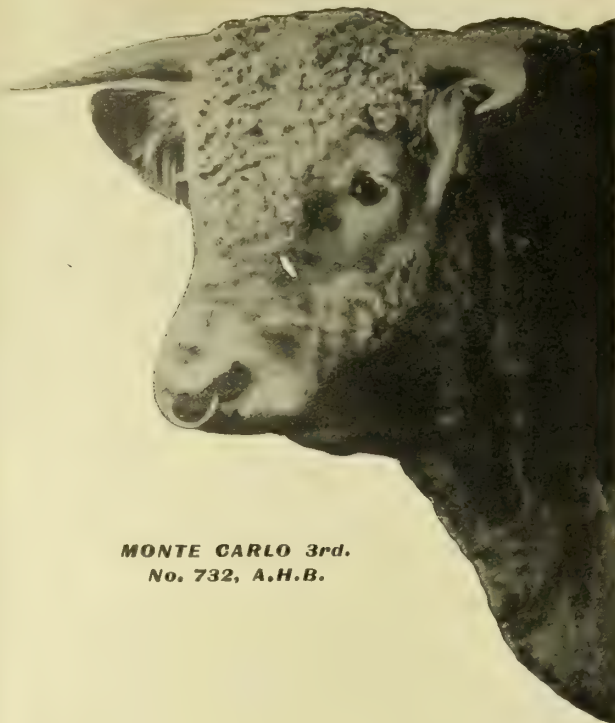
*The property of the Executors
of the late Hon. A. Ryrie, M.L.C.*

The Micalago Hereford Stud is founded on Stud Bulls and Heifers purchased from the noted breeders, Messrs. S. Reynolds, "Duninald," Patterson, N.S.W., P. Reynolds, "Hobartville," Richmond, N.S.W. The Stud is noted for robustness of constitution, bred and reared 2301 ft. above sea level.

In 1920, the "Hereford Stud" gained two (2) Champion Prizes, nine (9) Firsts, one Second at Southern Shows, and, in a field of 36, in the class one year and two, at the Royal Jubilee Sydney Show, Third Prize with "Paris," by "Monte Carlo" 3rd, No. 732 A.H.B., Dam, "Spot" 13th, Vol. 6, A.H.B. In 1921 the Stud won two Championships, six First Prizes and one Second.

Inspection invited, apply

The Manager, "MICALAGO," Michelago, N.S.W.



**MONTE CARLO 3rd.
No. 732, A.H.B.**



COMMODORE 2nd. By MAGNITUDE (imp.)
At the age of 2 years and 3 months

RAMORNIE HEREFORD STUD HERD

Founded on stock from the famous Gunyan Stud.

Stud and Herd Bulls for sale.

All Herd Bulls are pure bred, only Stud Book
Bulls and Cows used.

Apply:—

C. H. TINDAL, Ramornie, Copmanhurst, N.S.W.

Mrs. C. Lumley Hill.

BELLEVUE STUD HEREFORDS

Bellevue, Queensland

Composed of Pedigree Cows with pedigrees running back ninety years in Stud Books including such famous Championship Sires as:—"Field Marshal," "The Admiral," "Lord Clare," "Lloyd George" and "Lovelace" (imp.), bred by Sir John Cotterill, Bart., Gamons, Herefordshire, England. Best class Pedigree Stud Bulls and Herd Bulls for sale by Stud Book Sires from England, New Zealand and Southern Colonies.

Apply to **THE MANAGER, Bellevue, Q'land.**



"LOVELACE" (imp.)
1st Royal Show, Cardiff, Wales, England, under 12 months 1919.



NEW YEAR'S GIFT. 18 months old.
Bred at Gracemere. Sire, Prince Regent 534. Dam, Fancy 215.

GRACEMERE & TORSDALE STUD HERDS

Shorthorns. Herefords. Red Polls.

HIGH CLASS BULLS FOR SALE.

Bred on Red Water Country and inoculated for Pleuro.

ARCHER BROS. Ltd., Gracemere, Qld.

GISBORNE PARK STUD HEREFORDS

English Leicester and Corriedale Sheep

THE HEREFORD STUD was founded 1869 from imported stock. Noted for robustness of constitution, heaviness of flesh and truthness of type. Bred and reared nearly 2000 feet above sea level.

The whole Stud has been tested with Tuberculin, and found sound and free from Tuberculosis.

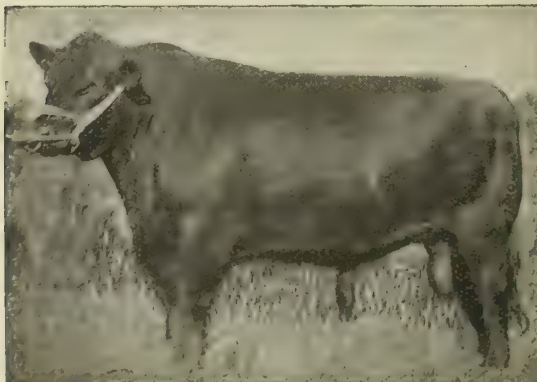
THE ENGLISH LEICESTER STUD was founded 1908 on the good old New Zealand blood. Noted for their hardy constitution and early maturity.

THE CORRIEDALE STUD was formed 1920 on ewes personally selected from leading New Zealand Studs. Famous for wool and mutton. The utility sheep

J. A. BEATTIE **GISBORNE PARK**
Phone 13 ——— **GISBORNE**



ROYAL BOY 4TH. Stud Sire at 3 years.



Imported Polled Angus Bull, Carolus of Mulben.

EDINGLASSIE POLLED ANGUS STUD

The property of White Bros., Edinglassie, Muswellbrook, N.S.W.

THIS Stud is founded and built up on blood imported from the best herds in Great Britain regardless of cost, and has been so maintained for the last 20 years.

Young Bulls for Sale, delivered on rail at Muswellbrook.

Further particulars on application to

White Bros., Edinglassie, Muswellbrook, N.S.W.

MANSEL COURT STUD HERD.

THREE FIRST-PRIZE WINNING YEARLING BULLS

From a pen-and-ink sketch by
Frank Calderon, R.A.

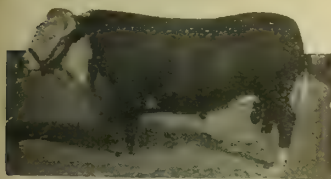
Reading from the left: MANSEL, BANNER MASTER (37354), 1st prize Royal Show, 3rd prize Worcester; MANSEL, BANNER GUARD (37350), 1st prize Royal Counties Show; MANSEL, BANNER REX (37350), 1st prize Bath and West, 1st prize Hereford and Worcester Agricultural Society's Show.

Four first prizes have thus been won by three different bulls from one herd—a record.

Apply to—

CAPTAIN R. T. HINCKES,
Mansel Court, Hereford, England.





DUNINALD Stud and Herd.

HEREFORD CATTLE.

Stud Bulls and Heifers for Sale; also Pure Herd Bulls. All Herd Bulls bred at Duninald are pure bred. Inspection invited.

Correspondence should be addressed—S. REYNOLDS, Duninald, Paterson, N.S.W.

"COTMORE"—1st Prize Grand Champion, R.A.S., Sydney, 1911.

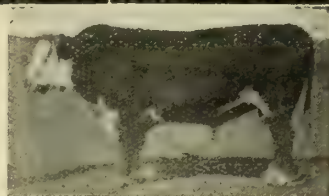
"ABBEY GREEN" STUD & HERD HEREFORD & DEVON CATTLE

The "Abbey Green" Hereford and Devon Herds were founded by the purchase of bulls and cows from the best herds in New South Wales and South Australia in 1908. Only best bulls procurable used since.

The cattle are noted for their hardiness, being bred 5000 feet above sea level, and mature very quickly when taken into hot climates.

YEARLING STUD AND HERD BULLS FOR SALE

Full particulars from **H. W. CURTIS, "Abbey Green," Llangothlin, N.S.W.**



"Curley" 96, aged 4 years. Used in Abbey Green Hereford Stud, 1918-20



EATON CONQUEROR. (IMP.)
Aged 2 years 2 months. Live weight, 1820 lbs

Hobartville Stud

Hereford Cattle.  Thoroughbred Horses.

High-class Stud Stock for Sale. Inspection Invited.

Apply **PERCY REYNOLDS, Hobartville, Richmond, N.S.W.**

Stud Bulls and Heifers for sale; also Pure Herd Bulls.

All Herd Bulls bred at Tocal are perfectly pure bred, which gives them a great advantage over the ordinary grade bulls.

Inspection invited.

Correspondence should be addressed—

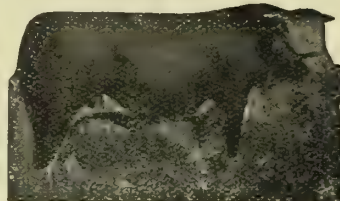
TOTAL Stud and Herd.

Hereford Cattle

and THOROUGHbred HORSES.

The Oldest Herd in Australia.
Established at Tocal in 1844.

Estate F. REYNOLDS, Tocal, Paterson, N.S.W.



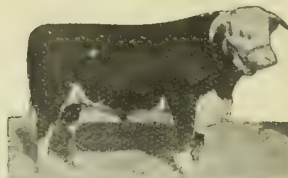
"WONDER."

BENVENUE STUD HERD OF HEREFORD CATTLE.

Established at "Benvenue," Singleton, N.S.W., in 1873.

The W.W. BRAND is well known in Queensland.

IMMUNE.



LANSDOWNE (imp.), 2 years 5 months

**STUD & HERD BULLS
FOR SALE.**

All herd bulls are pure bred.
Inspection invited.

**H. H. WADDELL,
Benvenue,
GAYNDAH, Q'LD.**



ROYAL FAME at 9 months.

Amateur Kodak enlarged.

GARNONS HEREFORDS

The property of

**Sir J. R. G. Cotterell, Bart., Garnons, Hereford,
England.**

Royal FAME, v. 51, at 9 months. Sire Sovereign 35628, dam Queen Elizabeth by Administrator 27298. Bred by Sir J. R. G. Cotterell, Bart. Sold at a high price to Senor Rodriguez, Uruguay.

During the last 20 years the Garnons Herd has won some 200 Champion and other prizes at all leading Breed and Fat Stock Shows in England. Stock Bull Saladin 31957, sire of Sovereign 35628: 1st and Champion Herefordshire and Worcestershire A.S.; 1st and Reserve Champion Royal Agricultural Soc., Cardiff; 1st Lord Tredegar's Newport, and sold for 4,000gs.; Lovelace, 1st Royal Agri. Soc.; Minstrel, 1st Royal Counties, Reading; Steer, 1st Smithfield Club.

Catalogue of Herd on application.

R. C. FIELD

Westfield

Westbury

Tas.



Shorthorn Stud

Founded on pure stock purchased from the Van Diemen's Land Co. about 1840. Only best blood used since.

STUD AND HERD BULLS FOR SALE.

Belmont Park Stud

RED POLLED CATTLE

Herd established 1891.

Stud bulls, heifers, and herd bulls for sale.

All herd bulls are pure bred.

Price, from 35 guineas.

Inspection invited.

Apply—**Philip Charley, Richmond, N.S.W.**



Honingham Astrologie (imp.) 10,303.

COLLENDINA SHORTHORNS.

The Property of Henry Hay & Son.

Foundation
Cows
purchased
from
Bolinda Vale.



Valuable
Young
Stock
for
Sale.

COLLENDINA DUKE OF DERRIMUT 38th.
Commended Sydney Royal, 1921, Class under 18 months.

COLLENDINA CORRIEDALES

Pure Corbett Blood.

(Registered Flock No. 12, Australian Corriedale Sheepbreeders' Association.)

For particulars apply—**HENRY HAY & SON, Collendina, Corowa, N.S.W.**



DIAMOND FAIRY.—1 & R.C. Hastings, 2, Palmerston N., 1916; 1, Hastings, 2 & R.C., Palmerston, 1 & C., Carterton, 1 & C., Wanganui, 1917; 1 & C., Masterton, 1 & C., Marton, 1 & R.C., Hastings 1 & C., Carterton, 1 & R.C., Palmerston N., 1 & R.C., Feilding, 1918; 1 & C., Marton, 1 & C., Taihape, 1, Hastings, 1919, and winning sire with progeny.

BLAIR ATHOL STUD SHORTHORNS

**First-Class Stud and
Herd Bulls for Sale.**

*Write for
Particulars*

DALZIELL BROS.,

Hunterville, North Island, New Zealand.



2-YEAR AND 3-YEAR HEIFERS.

CLIFTON STUD Shorthorns

Old Established Herd of High-Class Shorthorns.

Carefully bred for constitution, quality and early maturity. Winners of many Champions and numerous other prizes at Sydney, Melbourne and Brisbane Shows. Where young sale stock command top prices.

A. J. SIMPSON, CLIFTON, HAMILTON,
VICTORIA.



A Noted Clifton Stud Cow
BOLINDA DUCHESS OF DERRIMUT 400th.

COOMBING PARK SHORTHORNS



BOLINDA DUKE OF DERRIMUT 400th.

Founded on high-class female stock of Lee and Lowe blood. Extensive purchases of pedigreed cows have also been made from the studs of the late James Holmes, Bathurst; Sir Rupert Clarke, Bolinda Vale; and Mr. Norman Falkiner, Noorilim, Victoria.

The bulls now in use are from
Bolinda Vale.

**STUD AND HERD BULLS
FOR SALE.**

THE WHITNEY PASTORAL CO., Coombing Park, CARCOAR, N.S.W.

BINNIA DOWNS SHORTHORNS



BARITONE

Champion Shorthorn Bull, Sydney Royal, 1918; 1st and Champion, Sydney Royal, 1920, and Governor-General's Cup; 1st and Champion, Melbourne Royal, 1920, and winner of Gold Medal awarded by the Shorthorn Society of Great Britain and Ireland. At Sydney Royal 1921:—First Prize in his class; Champion, Sir Samuel Hordern's Cup, and Gold Medal awarded by the Shorthorn Society of Great Britain and Ireland. Bought for 1,700 guineas. Now being used in the Binnia Downs Stud.

THE FEMALE STOCK ARE AN EXCEPTIONALLY HIGH-CLASS LOT.

STUD AND HERD BULLS FOR SALE.

For particulars apply—**J. McMASTER, Binnia Downs, Coolah, N.S.W.**

Founded in 1908, and built up on the best blood procurable from leading Victorian studs—J. E. Robertson, Glen Alvie; A. J. Simpson, Clifton; John James, Derrimut; Ball Bros., Zaretan; A. J. Webb, Rathfarnham; N. Falkiner, Noorilim, etc.

The following additions to the stud were made by purchase at the Sydney Royal Show, 1918:—

Stud Bull **BARITONE**, 2 years 7 months, at 1,700 guineas, from Messrs. Parsons & Robertson, Watch Hill, Vic.

Stud Bull **HIGHTON DUKE of DERRIMUT**, 12 months old, at 1,000 guineas, from Messrs. Lidgett Bros., Vic.

Stud Heifer **ROYAL JESSAMINE** 89th, at 400 guineas, from Messrs. Parsons and Robertson, Vic.

Stud Heifer **DUNDAS DUCHESS of DERRIMUT** 13th, at 400 guineas, from Mr. A. J. Simpson, Clifton, Vic.

Edgecote Filbert (imp.) 1,075 guineas.

Rose of Chedglow 51st (imp.) C.H.B. Vol. 65.

Bianca Belle 9th (imp.) C.H.B. Vol. 64.

Hilda Warden (imp.) C.H.B. Vol. 64.

Aikbank Undine 4th (imp.) C.H.B. Vol. 64.

Further additions to the stud made in 1921 are:—Two Stud Shorthorn Heifers, purchased from Mr. A. J. Webb, of Rathfarnham, Vic.; viz.:—**LINDENOW DUCHESS of DERRIMUT** 113th, 1st Prize in her class, and **LINDENOW DUCHESS of DERRIMUT** 109th, 3rd Prize in same class at Sydney Royal, 1921.

HAMBLEDON HILL SHORTHORNS

Bulls for Sale.

Hambledon Duke of Derrimut 3rd

White,

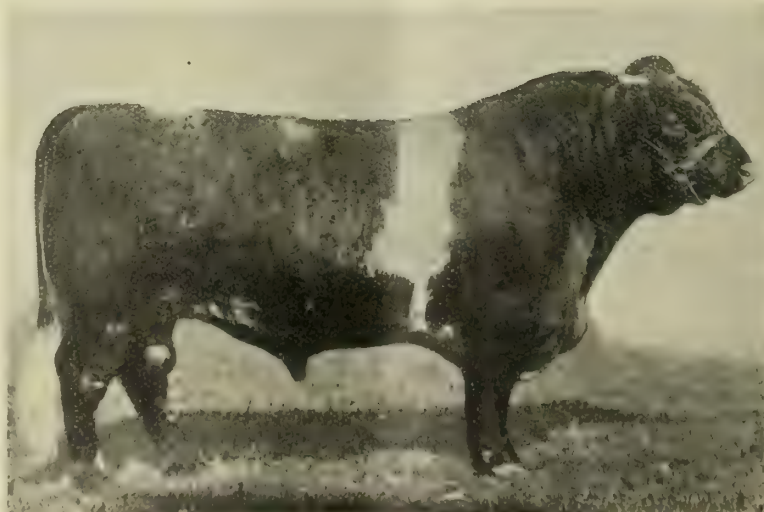
Calved August, 1919.

Sire,

Bolinda Duke of Derrimut 425th

Dam,

Hambledon Duchess of Derrimut 1st



"GRAND DUKE CLIFTON."

The Stud Sire in use from 1st February, 1921.

Bulls for Sale.

Hambledon Duke of Derrimut 4th.

Dark Red,

Calved Nov., 1919.

Sire,

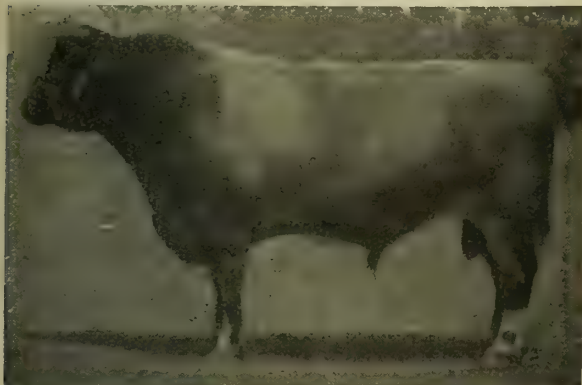
Zaretan Duke of Derrimut 24th.

Dam,

Bolinda Duchess of Derrimut 486th

Lloyd Jones, Hambledon Hill, Singleton, N.S.W.

LYNDHURST STUD, WARWICK, Q.



LYNDHURST ROYAL PEER.

Champion Bull, Brisbane, 1912-13-14-15- ; Toowoomba, 1914-15;
Warwick, 1911-12-13-14-16-17.

MURWEH, Charleville, Q.

THE MURWEH SHORTHORN STUD was formed in 1917, 400 high-class cows and heifers being sent there from Dulacca West with a number of high-class stud bulls, Lyndhurst bred, many of them prize takers, also the New Zealand bull, Diamond Crest. On the rich western country these cattle have done exceptionally well. The young bulls now for sale at Murweh are a very fine lot

Stallion—Hartfeil. Ayr Laddie ex Light Heart, 10 gns.

NOW FOR SALE—Murweh :—500 Bulls. Lyndhurst, Dulacca West and Murweh bred, 2 and 3 years old. For particulars apply—

C. E. McDOUGALL, LYNDHURST, WARWICK, Q.; or McDOUGALL & CO., WARWICK, Q.

Pure Shorthorn Stud and Herd Bulls

Combining robust constitutions with depth of flesh and quality. The Sires used in the Lyndhurst Stud have all been prize winners and include Bapton's Patriot (imp.), Clippers Duke (imp.), Hampton Bowling (imp.), and Clogher Augustus (imp.). First Sydney and Champion Brisbane. The Sires now in use are Lyndhurst Royal Peer (winner of 13 Champion prizes, including 5 Brisbane Champions), Clogher Augustus (imp.), Lyndhurst Royal Peer 11th (4 Firsts Brisbane and Reserve Champion), 3rd Duke of Ettrick, and Lyndhurst Royal Peer 13th.

The cows are mostly direct descendants of 4 cows imported by the late Hon. J. D. Macansh in 1875, and include 25 cows selected from Mr. Baldwin's Durham Court stud in 1913.

The Lyndhurst cattle have been very successful at the Queensland National Association Show, Brisbane, having won 7 Championships with bulls and 4 with cows during the last 12 years, also any number of class and group prizes.

STALLIONS.

Chantemerle (imp.) Polymelus ex Amphoraria 50 gns.
Seremond (imp.) Desmond ex Serenata 100 gns.

DULACCA WEST STUD, Roma, Q.

THIS SHORTHORN STUD was formed in 1904 with 100 Lyndhurst Stud cows and has since been added to each year from Lyndhurst Stud; also includes purchases from Baldwin's Durham Court Stud. The sires in use are all high class and mostly prize takers.

Calliope Stud

Wilson & McDouall Ltd., Calliope, Queensland.

Pure Shorthorn Stud & Herd Bulls for Sale

Bred on Red Water Country

The Cows in the Stud were selected from such noted breeders as the late A. A. Dangar, Mooki Springs; Trustees J. C. Hooke, Dungog, N.S.W.; J. Burgess, Canning Downs South, and several noted herds in Victoria.

The herd Bulls are bred at Calliungal, which Stud was formed in 1906 from Cows direct descendants of the Studs of the old A. A. Coy., Gloucester; Bell, Pickering; A. A. Dangar, Mooki Springs; and Trustee J. C. Hooke, Dungog. The purity has been maintained ever since by the use of the best bulls procurable.

Our object is to breed Shorthorns combining robust constitution with depth of flesh and quality.



COUNT GOLDIE (imp.)

No. 135952, Vol. 63, C.H.B. Sire Count Benedict. Now in use in the Calliope Stud.

Apply to Manager—CALLIOPE STATION, CALLIOPE, Queensland.

The Nyingay Shorthorn Stud

THE PROPERTY OF
ROY SIMSON, Mungadal, Hay, N.S.W.

This stud was formed in 1902, and has been continuously selected for the production of sorts that are robust and deep fleshed.

Stud and selected bulls usually
— for sale; also heifers. —



NYINGAY SUMMERTON 7TH (Grass-fed). One of the stud sires.



ZARETAN DUKE OF DERRIMUT 22nd.
Purchased at the 1917 Sydney Royal Show for 460 guineas, and is now used in the stud.

GRAMPIAN HILLS SHORTHORN STUD

The Property of A., R., and F. BOWMAN,
Gramplan Hills, Bunnan, New South Wales.

This stud was started in the early forties, and its purity has been maintained ever since by the use of the best bulls procurable.

At the Sydney Royal Show, 1918, Gramplan Duke of Derrimut 6th was sold for 950 guineas.

STUD BULLS & COWS & HERD BULLS FOR SALE.

For full particulars apply to

A. BOWMAN, 279 George Street, Sydney,
or to the Manager, Gramplan Hills, Bunnan.

THE JERULA SHORTHORN STUD

THE PROPERTY OF
COLIN CAMPBELL, Jerula, near Cowra, New South Wales

THE COWS of this Stud have been bred up from the Stud of the late JOHN LEE of Bathurst, and have been successful prizetakers.



NYINGAY WIDE 5th (at 23 months). Realised 400 gns. R.A.S. Sydney Sales, 1916.
Purchased by Mr. Colin Campbell, of Jerula, Cowra, N.S.W.
Bred by Mr. Roy Simson, Mungadal, Hay, N.S.W.



"MOOKI ROTHERFIELD"
Now in use at Mooki Stud.

R. R. DANGAR.

Mooki Springs Shorthorns

**HIGH-CLASS STUD and
HERD BULLS FOR SALE.**

APPLY **THE MANAGER,**
Mooki Springs, Quirindi, N.S.W.

"MILTON PARK" SHORTHORNS

A FEW
YOUNG
STOCK
FOR
SALE.



"Masterkey,"
sire of
the winning
female
group at the
Royal Show,
of England,
1920.

MASTERKEY (imp.)

For particulars of Stock For Sale, apply to—

The Manager, "MILTON PARK," Bowral, New South Wales.

BRUNETTE DOWNS (N.T.) STUD

SHORTHORNS

***BULLS for Western Australia
and Northern Territory***

At **BRUNETTE DOWNS, N.T., via Camooweal, Q.**

Bred on Tick Country

200 eighteen months to two years

By Bulls from Studs of Dangar, Bracker, McDougall,
Lomax and Cotton, out of progeny of a stud herd of
Cows sent from the A. A. Co.'s Gloucester property

Price : **£12/12/-** at Station.

Apply—

DALGETY & CO. Ltd.

BRISBANE, Q.; PERTH, W.A.

Road is now open to the West by Government bores.

Australian Sheepbreeders' Association

(Melbourne).

43rd Grand Annual Show

JUDGING DAY—1ST AUGUST

SHOW DAY — 2ND AUGUST

Substantial Prizes for Merinos (Fine, Medium, and Strong Wool, and Small Owners' Section).

British Breeds, Corriedales and Polwarths.

Entries Close 7th July, at 6 p.m.

Prize Lists, Entry Forms, and all particulars from

LESLIE SMITH, Secretary, "The Rialto," Collins Street, Melbourne.

GRAMSIE & LETHBRIDGE LTD.**Stock, Station, Land and Financial Agents,
Fat Stock Salesmen.****Stock Sale Days:—****Flemington: Sheep & Cattle, Monday & Thursday.****Homebush Bay: Pigs, Tuesday; Calves, Wednesday.**

Our Principals personally attend to all Stock consigned to them.

We are Property Salesmen, and invite particulars of same, and correspondence from all Agents and Principals.

Head Office: 16 O'CONNELL STREET, SYDNEY.**Branches—Wee Waa and West Wyalong.****Thursday, 4th August, 1921.****The
MELBOURNE ANNUAL
STUD SHEEP FAIR****Thursday, 4th August, 1921.****POWERS, RUTHERFORD & CO.** will hold their FIFTY-
FOURTH ANNUAL FAIR of**HIGH-
CLASS STUD SHEEP**from the leading breeders in the Commonwealth, in the extensive WARE-
HOUSES of YOUNGHUSBAND LTD., Kensington, on THURSDAY, 4th
AUGUST. Sheep consigned to POWERS, RUTHERFORD & CO. can be
trucked direct into the stores and buyers are enabled when necessary to
despatch their purchases by rail from the stores without any further
trouble or expense.**ENTRIES NOW BEING RECEIVED.****POWERS, RUTHERFORD & CO., Pure Stock Salesmen, Melbourne.****Wednesday, 3rd August, 1921.****THE MELBOURNE STUD SHEEP SALES****MERINO****Conducted by****BRITISH BREEDS****Goldsbrough, Mort & Co. Ltd.****Will be held in the Company's Central and Spacious Warehouses, Bourke St., beginning at TEN O'CLOCK precisely,**when they will offer a very choice
and representative selection of**STUD RAMS and EWES**from the principal breeders of the
various States.

Early entries of sheep for sale are invited.

Entry forms, and any other information desired, may be had on application to—

GOLDSBROUGH, MORT & COMPANY LIMITED, MELBOURNE.**ANNUAL STUD SHEEP SALES****Victorian Producers' Co-operative Company Limited**

Pure Stock Salesmen

589-605 Collins Street, Melbourne

Will sell by PUBLIC AUCTION on behalf of the leading breeders of Victoria, South
Australia, New South Wales, and Tasmania, Pure Merino, Lincoln, Border and
English Leicesters, Romney Marsh, Corriedale, Ideal, Carrsdale and Polwarths,
In our Wool Stores adjoining Macaulay Railway Station (1½ miles from Melbourne)**On Wednesday, 3rd August, 1921, at 10.30 a.m. sharp**

The British Breeds will be sold in the morning, the Merinos in the afternoon.

Entries close 1st July.

For Catalogues and full particulars apply—

Victorian Producers' Co-operative Company Limited,**589-605 Collins Street,
MELBOURNE.**

SYDNEY ANNUAL STUD SHEEP FAIR 1921

The undermentioned Agents will offer the usual consignments of

HIGH-CLASS RAMS & EWES

on behalf of noted breeders of Tasmania, New South Wales, Victoria, South Australia, and New Zealand, at their respective Sydney Warehouses, commencing on

MONDAY, 4th JULY, 1921,

and following days.

The Co-operative Wool & Produce Co. Ltd., Pyrmont.

Goldsbrough, Mort & Co. Ltd., Pyrmont.

Weaver & Perry Ltd., Pyrmont, in conjunction with

New Zealand Loan and Mercantile Agency Co. Ltd.

Hill, Clark & Co. Ltd., Pyrmont, in conjunction with

**Australian, Mercantile, Land and Finance Co. Ltd.,
and Powers, Rutherford & Co.**

Dalgety & Co. Ltd., Millers Point.

Information will be supplied on application to the respective agents.

SOUTH AUSTRALIAN MERINO STUD RAMS

We are in touch with all the leading Stud and Flock Masters in South Australia and can supply particulars of any class of sheep required.

We invite enquiries and will be pleased to inspect, report, or select stock for clients.

BENNETT & FISHER LIMITED,

LIVESTOCK SALESMEN. WOOL AND PRODUCE BROKERS, etc.

CURRIE STREET, ADELAIDE.

DALGETY & COMPANY LIMITED

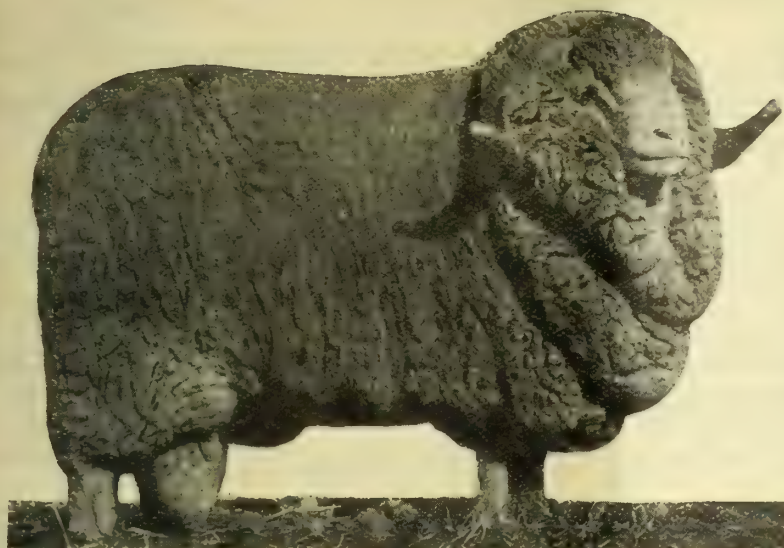
SYDNEY.

STUD STOCK SALESMEN.

**Pedigreed Cattle of all Breeds
Merino, Corriedale & British Sheep**

Being in constant touch with all the leading Breeders of the Commonwealth and New Zealand we are in an exceptionally favourable position to secure Stud Stock for intending purchasers.

Stud Flocks of South Australia



TYPICAL SOUTH AUSTRALIAN RAM.

renowned for constitution, size and heavy cutting fleece of high-class warp wool.

Sheepbreeders requiring Rams or Ewes from any of the South Australian Stud flocks are invited to communicate with the undersigned, who can place expert service at their disposal and afford special facilities for shipment through their Branches at all seaports.

DALGETY & COMPANY LIMITED, ADELAIDE.

SOUTH AUSTRALIAN MERINO RAMS

Being in touch with all the principal breeders
—we are in a favourable position to render
every assistance to intending purchasers.

Elder, Smith & Co. Limited

Stock and Station Agents, Wool Brokers, &c.,

ADELAIDE.

New Zealand Romney Marsh Sheep Breeders' Association

(Incorporated)

THE attention of Flock Owners in Australia is drawn to the merits of the New Zealand Romney Sheep. The stud flocks of the Dominion can supply your demands for rams and breeding ewes.

Our Romneys hold the World's Championship.

Correspond with the Association for full particulars.

The Secretary, P.O. Box 40, Feilding, New Zealand.

TO STUD SHEEP BREEDERS.

A. L. MORRISON, with many years' experience in practical station management, stud sheep breeding and classing, under the following well-known breeders of high-class Merino sheep—Sir Saml. McCaughey, Messrs. J. S. Horstall and F. S. Falkiner & Sons Ltd.—is prepared to undertake the classing of stud and station flocks, to furnish advice in regard to mating and the selection and purchase of stud Merino sheep.

Properties inspected and reported on, valuations made for probate and other purposes.

Address:—A. L. MORRISON, C/O CO-OPERATIVE WOOL & PRODUCE CO. LTD.,
3 BENT STREET, SYDNEY.

ROMNEY MARSH SHEEP.

The Registered Romney Marsh Flock at the Home of the Breed.

No. 18.

Owned by

ARTHUR FINN, Westbroke, Lydd, Romney Marsh, England.

This flock, established for more than 140 years, maintains the highest reputation. Honours gained in 1912: 1st for wool at the R.A.S.E. Show. In the Ewe Flock Competition of the Romney Marsh Sheepbreeders' Association, 1375 Westbroke Ewes obtained the 1st Prize in the large Flock Class, and Reserve for the Champion Cup for the Best Flock.

Inspection invited of 2000 registered sheep grazing on the Marsh under natural conditions.

Telegrams and Cables: ARTHUR FINN, LYDD.

A.B.C. Code 5th Edition used.

Telephone No. 2, Lydd. Lydd is 70 miles from London, S.E. Railway.

SOUTH DEVON SHEEP

Equal to any British Breed in Size of Carcase, Weight of Wool, and Length of Staple.

Unrivalled for crossing purposes to secure increased depth of flesh, weight of carcase, together with heavier fleeces and increased length of staple. Hardy and full of constitutional vigor, with remarkable aptitude for early development. Two hundred registered flocks to select from.

Ram Sales held annually at Totnes and South Brent, Devon, and Liskeard, Cornwall, in August; and at Truro in September.

List of Flockowners and full particulars from—

W. W. CHAPMAN, The Secretary,

Mowbray House, Norfolk St., Strand, London, W.C.,
England.

THE LEADING LIVE STOCK AGENTS AND EXPORTERS IN ENGLAND are

ALFRED MANSELL & CO., COLLEGE HILL,
SHREWSBURY, ENG.

We are the largest exporters of BRITISH PEDIGREE LIVE STOCK,
and are therefore in a position to buy on the best terms.

WE CAN SUPPLY ALL BREEDS OF HORSES, CATTLE, SHEEP AND PIGS.

Our old-established Firm have supplied animals for the foundation of Herds and Flocks in all the stock producing countries in the world, and have regularly supplied the principal breeders in maintaining them with new blood when required.

SHIPMENT AND INSURANCE.—All arrangements for Shipping Stock including Freight, Fodder, Attendance, Insurance, etc. undertaken at Lowest Market Rates. Our Shipping Department makes the Shipping arrangements for several prominent Live Stock Exporters and does the whole Live Stock Insurance of one line of steamers.

The Highest References Given and Required.

ENQUIRIES INVITED.

Cables: "PEDIGREE," Shrewsbury, England.

ROMNEY MARSH SHEEP WITTERSHAM FLOCK.

Founded in 1829.

Registered No. 24, Vol. 1-4, and No. 160, Vol. 16.

Owned by Lieut-Col. John Body, Wittersham Court, Wittersham, KENT, this is one of the oldest and soundest flocks of the breed. Has three times competed in the Ewe Flock Competition. In 1911 and 1913 it was placed second in the class for flocks containing between 200 and 500 ewes; in 1920 it was placed first in same class, and was reserve number for the Coronation Challenge Cup offered for the best flock of Romney Marsh ewes in England.

Cables and Telegrams:—JOHN BODY, WITTERSHAM.

Railway Station:—APPLEDORE.

Kent or Romney Marsh Sheep

The hardiest and best grazing mutton and wool sheep of Great Britain. Successfully acclimated wherever they are required.

Annual Ram Show and Sale

Held at Ashford, Kent, in September.

Descriptive pamphlet, list of Breeders and all information from—

W. A. Ball, 12, Hanover Square, London, W.1.

The Hoaden Court Flock and Herd

ROMNEY MARSH SHEEP

RED POLLED CATTLE

FIRST PRIZE FLOCK, CLASS III, 1920

Mr. H. T. GREENSTED, Hoaden Court, Ash, Canterbury, Kent, England

Breeds and owns a **Romney Marsh Flock**, with full individual pedigrees kept naturally without pampering, resulting in the production of sound vigorous, thrifty sheep, having that most desirable of all qualities—even staple and uniform fleeces. Its notable successes in 1919 were 2nd prize for Small Flocks in the 1919 Flock Competition, and 4th for Yearling Ram at Ashford, 1919.

A Herd of **Red Poll Cattle**, a breed unrivalled for the dual purpose of Milk and Beef Production, is also kept at Hoaden, and specimens of the best lines of breeding are to be found there.

Rail Stations:—Adisham, Grove Ferry, or Sandwich, S.E. and Chatham Railway. Telegrams, Hoaden, Ash, Canterbury.

The Hoo Romney Marsh Flock

CHAMPION FLOCK 1920 FLOCK COMPETITION.

Founded 1853. Registered Vol. 1.

Maintained entirely on commercial lines, no flock affords a better selection of thoroughly reliable breeding stock. Yearly drafting for over half a century has produced a fixed and most desirable type, the more prominent characteristics being great width and spread of carcass, even and uniform fleeces, and a general flock likeness, with most typical and well-covered heads. The best sires procurable have invariably been used, and the result is that, once a purchaser of Stud Sheep, always a purchaser. Apply the owner, Walter Miskin, White Hall, Hoo, Rochester, Kent, England. Railway Station, Sharnal-street. Telegrams, Hoo, Rochester. Telephone, 10 Hoo.

Kent or Romney Marsh Sheep.

The Adisham Court Flock

FOUNDED 1916.

REGISTERED 1917.

Property of **Mr. O. C. MILLEN, Adisham Court, Canterbury, Kent, England.**

Descended from the choicest strains of prize winning Blood, reared naturally, none excel it for hardiness, typical character, weight of bone and evenness of fleece. Its 1918 and 1919 records are unexcelled. At Ashford, the principal Breed Exhibition and Sale of the year, in 1918 it won 2nd Yearling Ram R. Champion and 4th best pen of five, and in 1919 2nd best group of five. Its sale averages were—1918, £159/15/-, top price 300 guineas; 1919, £63/2/4, top price 130 guineas. The 1918 Yearling and R. Champion was resold in Buenos Aires for £550.

Apply Owner, as above.

Cables and Telegrams: Wingham.

The Nash Court Romneys

Registered Flock No. 192.

A typical Flock representative of the choicest strains of blood, mainly those associated with the well known names of Macknade, Quested, Syndale Farmer and Otham Flocks.

Selections have been exported to Argentine, Uruguay, Chili, Falkland Islands, Japan and India.

Reared naturally and unpampered, the Sheep are hardy and sound in constitution.

Apply the Owner—

MR. R. G. TAYLER,
Nash Court, Margate, Kent, England.

RYELAND SHEEP

One of the oldest breeds of the British Isles, and the least crossed.

Leading Characteristics

Character and Symmetry. Hardy constituted. Mutton and Wool of the finest quality. Early maturity. Freedom from foot rot. Average weight of fleece washed 7½ lbs. Average dead weight of yearling at 12 months, 70 lbs. Special attention paid to export trade.

Write direct to the Secretary:—

W. H. WOODCOCK,
St. Cuthbert's,
Whitecross Road,
Hereford, ENGLAND.

LUDDENHAM COURT ROMNEYS

Founded 1899.

Winners of

Flock No. 122.

CHAMPIONSHIP FOR EWE FLOCK, 1919.

A Flock of Choice Breeding and merit as proved by above Championship won by ENTIRE FLOCK, judged on the farm in NATURAL BREEDING CONDITION.

INDIVIDUAL PEDIGREES. SOUND CONSTITUTION. TYPICAL FLEECE.

Apply

ASHLEY STEVENS,

Station Telegrams:—FAVERSHAM.

LUDDENHAM COURT, FAVERSHAM KENT.

Moreheads Limited

Woolbrokers, Stock and Station Agents,
BRISBANE, QUEENSLAND.

We can offer a wide selection of Pastoral Properties in all parts of Queensland.

NOTE.—We Specialise in Stud Stock.

McPHIE & CO.

CATTLE, SHEEP, AND PROPERTY SALESMEN, &C.
TOOWOOMBA, Branches at **PITTSWORTH, OAKEY,**
DALBY and CHARLEVILLE. QUEENSLAND.

BRISBANE STUD STOCK SALES

Dalgety & Company Limited

will conduct their Annual Sale of

STUD CATTLE AND STUD AND FLOCK SHEEP

During Brisbane Exhibition Week, from 8th to 13th August, 1921.

CONSIGNMENTS INVITED.

Dalgety & Company Limited, Brisbane,

STOCK AND STATION AGENTS.

WOOL AND PRODUCE BROKERS.

STUD STOCK SPECIALISTS.

All Auction Sales, in which
we hold many Records, are
conducted by Principals.

BADGERY BROTHERS LTD.
SYDNEY, N.S.W.

Dont Forget !!!

*To send us your draft for the next
Royal Sydney Sales.*

In touch with All Leading Breeders, and can supply Any Breed of Sheep or Cattle.

Write BADGERY BROTHERS LTD.

SYDNEY.

ALLAN STEWART PROPRIETORY LTD.

15 ST. JOHN STREET, LAUNCESTON, TASMANIA.

Wool Brokers, Stud Stock Salesmen & Land Agents*We Specialise in all Stud Stock.***CATTLE.**—Ayrshires, Jerseys, Shorthorns, Devons, Angus, Herefords.**SHEEP.**—Lincolns, Leicesters, Southdowns, Romney Marsh, Corriedales, Border Leicesters.**STOCK FOR PRIVATE SALE. PROPERTIES, FARMS to PASTORAL ESTATES.**

Catalogues on Application.

A. J. HUNTER,
F.I.A.Q., ETC.**JAMES HUNTER & CO.****Public Accountants, Auditors, etc.**PASTORAL MATTERS
A SPECIALTY.

DALBY, G.

For Sale by Public Auction.**"WEEWONDILLA"**DALGETY & CO. LTD. & GORDON GRAHAM, COLDHAM & CO., BRISBANE
(under instructions from the Vendors) will offer by PUBLIC AUCTION (through their Auctioneer), at the GRESHAM HOTEL, BRISBANE, on**THURSDAY, 7th JULY at 11 a.m.****The Property known as "WEEWONDILLA"**

Situating about 59 miles from LONGREACH, and about 14 miles from MUTTABURRA, with which it is connected by telephone, comprising:—

GRAZING FARM, No. 25, Por. 14V, Par. Rutilus, 19,600 acres—40 years from 1-7-89
Rent, 1½d. per acre per annum.GRAZING FARM, No. 23, Por. 12V, Par. Rutilus, 20,000 acres—40 years from 1-1-90
Rent, 2d. per acre per annum. Total, 39,600 acres (more or less)

(These Rentals are due for Re-Appraisalment).

The Country is described as FIRST-CLASS SHEEP COUNTRY, being principally Open Mitchell Grass Downs, timbered with Gidyea, Boree, and Whitewood. Watered by Artesian Bore and about 30 miles of Bore Drains, Bradley's Creek, three overshot Dams, kept filled by bore streams. Five miles single frontage to the Thompson, and a double frontage to Landsborough Rivers. "Weewondilla" is well improved, being Fenced and Subdivided into 26 Sheep Paddocks, with good Homestead, Cart Shed and Store, Wool-Shed, Wool Room, Sheep Dip, Drafting Yards (with water laid on to the yards); also an Outstation Hut. With the property will be offered Household Furniture and a complete Plant for working the property, including a 1914 model Buick Car. Also the following Stock:—15,700 (more or less) Mixed Sheep, pure Bundemar Blood, to be shorn June, 1921, including 5900 Ewes lambing April/May. These Sheep have been carefully culled for the last eleven years, high-class Rams only having been used. 300 (more or less) Mixed Cattle, 57 (more or less) Horses.

TERMS—Half cash, the balance in four equal annual instalments, bearing interest at 6½% per annum, payable half-yearly.

For further particulars apply to—

Dalgety and Co. Ltd., Brisbane and all branches

or

Gordon Graham, Coldham and Co., Brisbane

Agents in conjunction.

ANNUAL**Stud Sheep Sales**

For twenty-five years or thereabouts prior to the year 1918 the Annual Sales of Stud Sheep were held in the same week as and subsequent to the Australian Sheep Breeders' Association's Show, which takes place in the month of August in each year.

In 1910 the Victorian Producers' Co-operative Company Limited was registered. This Company's business rapidly expanded until in a few short years it had developed to such an extent that it was handling, on both the buying and selling side, all the requirements of the farm and station. The interests and aims of the Company being truly Co-operative, and its shareholders being without exception farmers and graziers, it naturally followed that the directorate consisted, and still consists, wholly of men of rural interests and sympathies. These gentlemen quickly recognised the great benefits that would accrue to the man on the land and the community as a whole if the farmers could be induced to use pure sires in their flocks and herds.

The Department of Agriculture in this State has done a great deal in this direction, and with the object of assisting in bringing the lesson right home to their shareholders and clients, the Victorian Producers Co-operative Company Limited established a Stud Stock Department.

In adding this business to the Company's already wide sphere of activities, the Directors realised that their action could not be regarded in the light of a money-making proposition, as the handling and selling of stud stock is rarely remunerative from a broker's point of view. However, in the true Co-operative Spirit they were prepared to overlook that aspect of the case in consideration of the undoubted gain to the farmer and grazier which must follow an improvement in the quality of flocks and herds.

The movement met with success from its inception, so much so that it was found both expedient and necessary to hold an Annual Sale of high-class Rams and Ewes. The first of these sales was held in the Company's warehouses in Flinders-lane on 25th September, 1918, during Royal Show Week, when 352 sheep were penned. The sale was in every way satisfactory, and a total clearance was made at good prices. The two following years, on 24th September, 1919, and 22nd September, 1920, the sale was held in the Company's wool warehouses at Macaulay, and were equally successful, 1081 sheep being disposed of.

Complications arose, however, owing to the sales being held during Royal Show Week, with its many activities, including sales of stock at the Show Grounds. Difficulty was experienced in obtaining trucks during that week, and consignments were subjected to annoying delays.

At the request of many leading breeders, the Company considered the position, and have decided to hold their sale in future at the time usually set apart for that purpose, viz., immediately following the Australian Sheep Breeders' Show in August.

It is not the desire of the Company to clash with the arrangements of any other firm of live stock brokers, who may be in the habit of selling in that week, but the interests of the breeders and the purchasers must be the only consideration.

The Victorian Producers' Co-operative Company Limited has made a genuine effort to work amicably with the two broking house concerned, but without success. They wish to inform their clients and the public that their sale will take place at their Macaulay warehouse on Wednesday, 3rd August next, and they have decided to sell their Merinos when the other brokers are selling British breeds, and vice versa.

An excellent catalogue of high-class Sheep will be submitted. Entries close on 1st July punctually, and breeders are requested to kindly note this, as late entries will not be catalogued.

Stud Stock.

The Official Organ of the "Australian Longwool
Sheepbreeders' Association,"

and

The Official Organ of the "Stud Beef Cattle
Breeders' Association of Australia."

Latest Stock Returns.

AUSTRALIA AND NEW ZEALAND.

	SHEEP.		CATTLE.		HORSES.	
	1919.	1920.	1919.	1920.	1919.	1920.
N. S. Wales ...	33,465,534	29,901,701*	2,852,047	2,854,877*	577,133	496,403*
Queensland ...	17,379,332	16,596,803	5,940,433	6,610,125	731,705	741,487
Victoria ...	14,422,745	12,171,084	1,631,120	1,575,159	513,500	487,503
S. Australia ...	6,625,184	6,014,565	342,768	349,562	269,255	264,901
W. Australia ...	7,183,747	6,697,951	943,847	880,644	180,094	174,919
Tasmania ...	1,841,924	1,781,425	218,234	214,442	41,231	39,452
N. Territory ...	58,620	8,811	570,039	610,534	31,436	35,839
Total Aust.	80,977,086	73,172,340	12,498,488	13,095,343	2,344,394	2,240,504
New Zealand	25,828,554	23,914,506	3,035,478	3,101,945	363,188	346,407
Argentina ...	—	45,309,419	—	27,392,126	—	8,323,816

N. S. Wales returns in each case are to 1st Jan., 1920, & 1st Jan., 1921
South Australia " " " to 30th June, 1919, & 30th June, 1920
Queensland " " " to 1st Jan., 1920, & 1st Jan., 1921
Western Australia " " " to 1st Jan., 1919, & 1st Jan., 1920
Tasmanian " " " to 1st Mar., 1919, & 1st Mar., 1920
Victorian " " " to 1st Mar., 1920, & 1st Mar., 1921
N. Territory " " " to 1st Jan., 1919, & 1st Jan., 1920
New Zealand—Sheep returns only are to 30th April, 1919, & 30th April, 1920
Cattle and horses are to 31st Jan., 1919, and 31st Jan., 1920.

* Estimated.

Forthcoming Shows, 1921.

JUNE.

20-25—Olympia Horse, London, G.B.
21-24—Palmerston North National Dairy, N.Z.
23-25—Rockhampton, Q.
28-July 2—English Royal at Derby.
30-July 2—Sydney Sheep.

JULY.

4—Sydney Ram Sales.
13-14—Charters Towers, Q.
20-21—Townsville, Q.
26-27—Barcaldine, Q.
26-29—Highland at Stirling, Scotland, G.B.

AUGUST.

1-2—Melbourne Sheep.
3-4—Melbourne Sheep Sales.
3-4—Suffolk Sheep at Ipswich, G.B.
8-13—Brisbane National.
9-12—Royal Dublin Horse, Ireland.
10-11—Ballarat Sheep, Vic.
10-11—Balmoral, Vic.
17-18—Hamilton Sheep, Vic.
23-25—Wagga, N.S.W.
30-31—Corowa, N.S.W.
30-31—Forbes, N.S.W.
31-Sept. 1—Lockhart, N.S.W.

SEPTEMBER.

6-8—Young, N.S.W.
6-8—Albury, N.S.W.
13-14—Cowra, N.S.W.
13-17—Adelaide Royal.
11-15—Cootamundra, N.S.W.
15-17—Singleton, N.S.W.
19-24—Melbourne Royal.
20-22—Temora, N.S.W.
28—Deniliquin, N.S.W.
28-29—Horsham, Vic.
28-29—Yarrawonga, Vic.

OCTOBER.

4-7—Perth Royal, W.A.
5-8—Hay, N.S.W.
11-13—Bendigo, Vic.
11-12—Euroa, Vic.
11-12—Narandera, N.S.W.
12-13—Hamilton, Vic.
25-26—Shepparton, Vic.
26-27—Warrnambool, Vic.

NOVEMBER

9-10—Ballarat, Vic.
15-16—Kyneton (Grand National), Vic.

APRIL 1922.

10-19—Sydney Royal.

Programme of Sydney Carnival, 1921.

SHOW.

Thursday to Saturday, 30th June to 2nd July.—Annual Sheep Show conducted by a joint committee representing the Royal Agricultural Society of New South Wales and the New South Wales Sheepbreeders' Association at Moore Park.

MEETINGS.

Friday, 1st July.—The New South Wales Sheepbreeders' Association's annual meeting at the Council-room of the Royal Agricultural Society of New South Wales, "Ocean House," Moore-street, at 8 p.m.

Saturday, 2nd July.—The Australian Corriedale Sheepbreeders' Association's annual meeting at the office of "The Pastoral Review," Bligh Chambers, 10 Bligh-street, at 8 p.m.

Wednesday, 6th July.—The Australian Longwool Sheepbreeders' Association's annual meeting at the Country Club, Twyford House, 17 Castlereagh-street, at 8 p.m.

Thursday, 7th July.—The Stockowners' Association of New South Wales annual meeting at the office of "The Pastoral Review," Bligh Chambers, 10 Bligh-street, at 8 p.m.

Thursday, 7th July.—The New South Wales Sheepbreeders' Association's special general meeting at Royal Chambers, 3 Castlereagh-street, at 10.30 a.m.

SALES.

The undermentioned agents will offer the usual consignments of high-class rams and ewes on behalf of noted breeders of Tasmania, New South Wales, Victoria, South Australia, and New Zealand at their respective Sydney warehouses, commencing on Monday, 4th July, 1921, and following days:—

The Co-operative Wool and Produce Company Limited, Sydney; Goldsbrough, Mort and Co. Limited, Sydney; Weaver and Perry Limited (and the New Zealand Loan and Mercantile Agency Company Limited, Sydney, in conjunction); Hill, Clark and Co. Limited; Australian, Mercantile, Land and Finance Company Limited, Sydney (and Powers, Rutherford and Co., Melbourne in conjunction); and Dalgety and Co. Limited, Sydney.

Suffolk Sheep.

In response to numerous inquiries for further particulars of the Suffolk breed of sheep, which of recent years has made such rapid strides in public favour in many parts of the world, we give the following from an interesting pamphlet by the secretary of the Suffolk Sheep Society, England:—

The fecundity of the Suffolk dates back to its origin. Lambing records have been kept by the Suffolk Sheep Society for over thirty years. In 1889 the average for all flocks registered by the society was 134.50 lambs reared per 100 ewes mated, and the average for the whole 33 years is 133.01 per cent. In Scotland to-day from 150 per cent. to 175 per cent. is the average, and the death rate in ewes is exceedingly small, for, with the fine clean-cut head very little difficulty is found at lambing time. This quality is taken advantage of by many flockmasters who, although they may not use Suffolk rams entirely for crossing purposes, always use a Suffolk ram on their shearing ewes, and find the death rate much reduced and the fall of lambs increased.

Early maturity and wealth of lean flesh are the points which have won the breed a name—alive and on the block. Alive, Suffolks and Suffolk crosses have held the championship and reserve for championship of the Scottish National Fat Stock Club no less than fourteen times. At Smithfield pure-bred Suffolks have won a third of the whole of the championships and reserves for championship. The average weight of Suffolk lambs under twelve months old exhibited in the live section at Smithfield for the ten years 1908-19 (no show was held in 1917 and 1918) was 201.8 lbs. per lamb.

*At the Smithfield Club Show in 1920, among the fourteen competing breeds the Suffolks provided the heaviest lambs in the show, and that when four or five of the best pens of Suffolks were unavoidably absent. These lambs were even heavier than any of the wethers (under twenty-four months) of any short-woolled or mountain breed, with one exception.

In open carcase competition at Smithfield, Suffolks and Suffolk crosses have won half the championships and reserve for championship, leaving half to be claimed by every other breed of sheep in the kingdom. Suffolk lambs have won since 1900 two-thirds of the whole of the prizes in the Short-wool lamb class, leaving one-third to be claimed by all other short-wool sheep in the kingdom. Suffolks crossed with no less than ten different breeds have won, since 1900, half the total awards in the crossbred classes, leaving half to be claimed by all other breeds in the kingdom.

Showyard results are a matter of interest to the few in times of peace, but the standard of production demanded by four years of war brought the economic and excellent qualities of the Suffolk home to the producer as it had never been brought before; selling on the dead weight basis brought the great "dieing" qualities of the Suffolk home to breeders and feeders alike, and they now realise the value of a cross that is able to build a carcase of prime lean flesh quicker than most other breeds, and give greater weight of mutton for the same amount of keep. The old Norfolk foundation stock, and the bleak arid nature of much sheep land in East Anglia, are accountable for the hardness which is a factor in the adaptability of the Suffolk to such a variety of soils and climates, and which stands it in such good stead as a coloniser overseas. The following report of Suffolks in the United States in 1919 is typical:—"The sheep came through in exceptionally fine condition, were apparently not tired, were extremely alert, and have splendid appetites. The ram and ewes are in medium flesh—just right in our judgment for breeding." This was in August after an eight weeks' journey, and two months later:—"In bringing live stock from overseas we frequently have some trouble with them during the first year following their arrival. These sheep, however, have been vigorous since their arrival here, and have a bloom that denotes their health and thrift. It is encouraging to note the apparent immediate adjustment of the breed to their new environment." In South Africa the Suffolk crosses exceedingly well with the Blackhead Persian ewe, producing a useful fleece of good hosiery wool, and an Al carcase even in the first cross. They lose the fat rump of the Persian, and thicken out very much in the thigh. In a country of scrub and "steek grass" the Suffolk is invaluable on account of its comparative length of leg, and not too heavily woolled body. In North and East Africa the Suffolk is in demand for crossing with the native ewes. Inquiries are to hand at the moment for both ewes and rams for British East Africa, and Scotland has also sent selected consignments to Canada and New South Wales. Chile has been a consistent importer of Suffolk rams for the past twenty years, and is now importing high-class pedigree ewes.

In Scotland, Suffolks are crossed mainly with half-bred (Border Leicester-Cheviot), mule (Border Leicester-Blackface) or Border Leicester ewes. The last-named cross produces perhaps the most quickly maturing lamb in existence, gets to a big weight in a very short time, and is in great demand by butchers.

In addition to its pre-eminence as a mutton producer, the Suffolk sheep produces a fleece of wool of the very type which is in good demand to-day and likely to be in the future, a fleece of the quality known as 56's with plenty of crimp. Mr. J. Thomson Stephen, wool expert, Leicester, writing in the "Mark Lane Express," London, 1st December, 1919, says:—"There can be no manner of question regarding the great favour which is shown for Suffolk wool by manufacturers of fine-class hosiery fabrics. The wool is just the right length and fineness to give superior results in the fabrics as regards softness, spring, and warmth. The various crosses of Suffolk sheep, too, yield fleeces of grand character of the very kind desired. The Suffolk rams are very impressive in imparting their characteristics to the wool of the sheep with which they are crossed. During the wool sales, where fine wools of the highest character in the kingdom are shown, a very large proportion were half-breds by Suffolk rams. I made a very careful inspection of these half-bred Suffolk lots, and in every instance they commanded the top prices of the day. They produce yarns of what is known as 57 to 58 counts, and these are the very qualities most in favour for all the finest grades of sound and durable hosiery fabrics."

The dense, closely-packed fleece of a Suffolk sheep leads the unskilled to think that there is a shortness of weight in comparison with other breeds, but such is not the case to any extent. Suffolk breeders aim at an average clip of extra fine fibre with a great quantity and quality carcase beneath.

Sydney Sheep Carnival.

Sales at the Showground.

For some years there has been much discussion over the question of holding the annual stud sheep sales in Sydney at the showground instead of in the agents' stores, and this year there will probably be a trial of the proposal, in part at least.

Conferences have recently been held between the Royal Agricultural Society, the N.S.W. Sheepbreeders' Association and the Agents' Association to discuss the whole position, with the result that it was decided to allow any breeder the option of having his sheep sold either at the stores or at the grounds. Several members of the Corriedale Association have decided to sell at the grounds, and very likely a few Merino breeders. Doubtless, some Longwool breeders will do likewise.

Merino entries for the show are stated to be fully equal to those of last year, while in British breeds there is a considerable increase, Romney Marsh and Corriedales especially being strongly represented.

Sydney Sheep Sales.

Some of the Offerings.

The Sydney sheep sales take place at the beginning of next month, and we give herewith a list of some of the consignments that will be submitted by breeders, though the agents advise us as we go to press that they are not yet in a position to furnish anything like a complete list. As stated elsewhere, a number of Corriedales and British breeds and a few Merinos will be sold at the showgrounds, but the bulk of the latter will, as usual, be sold in the agents' stores.

Dalgaty and Co. Limited advise that they will offer the following Merinos:—

		Merinos.		
		Stud.	Selected.	Flocks
South Australian:—				
H. Melvin Collins	.. .. .	3	6	—
E. W. Hawker and Son	.. .. .	—	—	10
H. C. and R. M. Hawker	.. .. .	3	—	25
M. S. Hawker	.. .. .	6	7	5
Walter Hawker	.. .. .	—	—	—
Koonoona Proprietors	.. .. .	8	—	—
T. Sandland	.. .. .	10	—	—
New South Wales:—				
Harry L. Austin	.. .. .	2	—	130
Estate Late J. B. Donkin	.. .. .	1	16	—
Franc B. S. Falkiner	.. .. .	—	44	—
F. S. Falkiner & Sons Ltd., Wanganella Estate	.. .. .	22	8	45
H. E. Kater & Son	.. .. .	—	3	50
Frank Mack	.. .. .	—	—	40
Wangamong Pastoral Co. Ltd.	.. .. .	—	—	50
Willandra Pastoral Co. Ltd.	.. .. .	1	—	—
Chas. Mills (Uardry) Ltd.	.. .. .	38	—	—
Thos. Milliar	.. .. .	8	20	40
Estate C. H. Edols	.. .. .	10	—	—
Roy Simson	.. .. .	—	—	—
		12	104	395

Also, Wanganella Estate for offer on showground, 7 special stud rams.

		Other Breeds.	
		Rams.	Ewes.
C. H. Ensor (Corriedale Studs)	.. .. .	13	12
D. Macfarlane	.. .. .	5	(Showground)
Norman Nicolson	.. .. .	10	—
Chas. E. Prell	.. .. .	3	2
S. M. Osborne (Romney Marsh Studs)	.. .. .	4	(Showground)
A. Brunskill (Lincolns)	.. .. .	110	(Flocks) 35
T. H. Brunskill	.. .. .	6	(Studs) 3
A. S. Brunskill (Border Leicesters)	.. .. .	35	(Flocks) 20
G. H. Lyons	 (Stud)	1	(Flocks) 20
		187	72

Weaver and Perry Limited, acting in conjunction with the New Zealand Loan and Mercantile Agency Company Limited, will hold their sale in the stores of the latter company at Pyrmont on Wednesday, 6th July. Advices are not yet complete, but the catalogue will include consignments of Merinos from Messrs. Hunter White (Havilah), H. A. Wright (Bickham), Exors. of R. W. White (Harben Vale), Read Bros. (Kooroogama), Merribee Company (Merribee), Thos. Milliar (Deniliquin Stud Park), S. T. Starr (Dalton), and J. Alston Wallace (Boobula).

In Longwools, Mr. G. H. Lyons, of Wagga, will pen 20 Border Leicester flock rams.

The following Merinos will be offered on the showgrounds:—

A/c Messrs. Read Bros., Kooroogama:—8 special stud rams. A/c Exors. R. W. White, Harben Vale, 6 stud rams.

Hill Clark and Co. Limited state:—So far advices received in regard to stud sheep sales are:—Merinos—On account of Koonoona Proprietors, South Australia, 5 stud rams; Springwell Pastoral Company Limited, Springwell, Cooma, 3 stud rams, 40 selected rams; G. E. Stuart Limited, Goolgumbula, Jerilderie, 2 stud rams, 18 selected rams; Sidney Austin and Sons, Wambiana, Trangie, 10 special stud rams, 32 selected rams; Harry L. Austin, Eli Elwah, Hay, 3 stud rams, 130 selected rams; Wangamong Pastoral Company Limited, 50 selected rams; W. H. Treweeke and Sons, Eulalie, Mogil Mogil, about 4 special stud, 20 stud rams, 80 selected rams; Thomas Millear, Deniliquin Stud Park North, Jerilderie, 2 stud and 30 selected rams; Probable other senders are:—Austin Wanganella Company, Deniliquin; Austin Pastoral Company of Bringagee; W. W. Killen, Merribee, Barellan; Franc B. S. Falkiner, Haddon Rig, Warren; Howe and Horton, Murgha, Deniliquin; J. A. Wallace, Boosabula, Deniliquin; Kater Bros., Mumblebone, Warren.

No advices so far respecting British breeds.

The stud sheep to be offered by **Goldsborough, Mort and Co. Limited** consist entirely of pure Merinos, and drafts have already been advised from Tasman and South Australia, in addition to those from New South Wales flock-masters. Advices to date indicate that sheep from the following well-known Tasmanian studs will be catalogued:—Belle Vue (Estate late Hon. Jas. Gibson), Eskvale (Eskvale Estate Limited), Scone (W. Gibson and Son), Strathroy (C. B. Grubb), Rhodes (Keith Gatenby), Bengoe (Hon. F. W. Grubb), and Fairfield (Foster and Taylor). Particulars received to date show that special stud and stud rams will be sent forward, in addition to a fair number of selected rams and some well-bred stud ewes.

From South Australia 6 rams on account of Koonoona Proprietors will be submitted, while the following New South Wales breeders will be represented by some of their special stud and selected rams:—Geo. Currie, Strathallyn, Narramine; F. D. McMaster, Dalkeith, Cassilis; Geo. W. Bruce, Loombah, Cummock; J. Sioane and Son, Mulwala Station, Mulwala; and Thos. Millear, Deniliquin Stud Park North; R. W. Ronald, Nap Nap, Hay; H. L. Austin, Eli Elwah, Hay; Canonbar Station, Mowera.

Melbourne Sheep Show.

The Melbourne Sheep Show will be held on 1st and 2nd August. Entries for all classes close on 7th July.

Campbell Town Sheep Show, Tasmania.

The Campbell Town Sheep Show, the 83rd of the series, held on 8th June, was well up to the level of the best that have been held, but there was additional interest in the fixture this year, because it was associated with other events held to celebrate the centenary of Campbell Town. A very fine display of sheep was made, but the very dry season that has been experienced in the midlands of Tasmania was reflected in the condition of some of the sheep, especially in the younger classes. The champion Merino ram came from the unshedded division, and was exhibited by Mr. John Taylor, of Winton. The winner, Midas, is rising four years, and is by Murad II. out of a Winton stud ewe. He has been used in the Winton stud this season. He is a definite type of sire, and some of the breeders considered that he has inherited many of the characteristics of his famous ancestor, President. He is a particularly well developed sheep, better than the average nowadays, and is beautifully fleeced. His wool is very dense, of good staple, and medium type. Midas also carried off a number of the special prizes. The reserve champion came from the Belle Vue stud. He is a sheep of good type, fairly well developed, and carries a fine fleece of good length and great density. A feature of the ram section was the unshedded lamb class, as the winner, a young Winton ram, is of exceptional merit, and the judge, Mr. A. W. Burbury, declared him to be one of the best lambs he had handled.

The champion Merino ewe came from the late James Gibson's Belle Vue Estate. She is 2 years and 9 months old, and was sired by Imperial. She is a sheep of great quality, well grown and splendidly proportioned, while she carries a high-class fleece of medium type. The reserve champion was a two-tooth ewe from Messrs. W. Gibson and Sons' Scone stud. She was lighter than the champion throughout, but she is a very stylish sheep and beautifully woolled. The Scone stud was successful in the aged ewe division with sheep of capital quality. Some high class young ewes were shown, but some were in low condition.

The Corriedales were about the average quality seen in late years. A new prize-taker to enter the ranks is Mr. A. Coombe,

of Campbell Town, who showed the champion ram, a good, evenly-woolled sheep of masculine type. The same breeder also penned the champion ewe, a very fine all-round specimen.

The Leicesters were very strong, the best seen at Campbell Town, and competition was very keen. The champion, penned by Mr. R. G. Heazlewood, of Whitmore, is a lengthy, well-built sheep, with an excellent fleece. The same breeder also showed the champion ewe. She is a big-framed sheep, with a particularly good back, and carries a splendid lock.

Border Leicesters were few, and Mr. H. R. Heazlewood took the awards.

Rivalry was keen amongst the Lincolns. Messrs. W. French and Sons penned the champion ram and ewe. The ram showed remarkably good development, and carried an exceptionally good fleece of great lustre and quality. The ewe is a symmetrical sheep of good development and splendidly fleeced.

Mr. S. Porter, of Colebrook, was the only exhibitor of Romney Marsh.

A competition that aroused interest was for the heaviest ram of any breed in the yards. For this Mr. E. W. Oliver offered a challenge cup. Mr. R. G. Heazlewood secured first with an English Leicester, weighing 277 lbs. Mr. N. Heazlewood was next with another English Leicester, which scaled 250 lbs. A Romney Marsh was third, weighing 246 lbs. He was from Mr. S. Porter's stud. Following were the Merino prize-winners:—

MERINOS.

Shedded Sheep.

Ram, Exceeding 2½ Years.—Trustees Jas. Gibson's Estate, Belle Vue, 1, 2, 3, 4, and 5. Ram, Exceeding 1½ Years and not 2½ Years.—John Taylor, Winton, 1; Trustees Jas. Gibson's Estate, Belle Vue, 2, 4, and 5; J. D. Foster, Fairfield, 3. Ram, lambd between 1st January and 1st July of the Previous Year.—Trustees Jas. Gibson's Estate, Belle Vue, 1 and 4; W. Gibson and Son, Scone, 2, 3, and 5. Pen of Two Rams, lambd between 1st January and 1st July in Previous Year.—W. Gibson and Son, Scone, 1; Trustees James Gibson's Estate, Belle Vue, 2.

Ewe, lambd before January in Previous Year.—W. Gibson and Son, Scone, 1 and 2; J. D. Foster, Fairfield, 3 and 4; Trustees Jas. Gibson's Estate, Belle Vue, 5. Ewe, lambd between 1st January and 1st July in Previous Year.—W. Gibson and Son, Scone, 1, 2, and reserve champion. Ewe, lambd since 1st July in Previous Year.—Trustees Jas. Gibson's Estate, Belle Vue, 1 and 2. Pen of Two Ewes, lambd between 1st January and 1st July in Previous Year.—Trustees Jas. Gibson's Estate, Belle Vue. Pen of Two Ewes, lambd since 1st July in Previous Year.—Trustees Jas. Gibson's Estate.

Unshedded Sheep.

Ram, lambd before 1st January in Previous Year.—John Taylor, Winton, 1, 4, and champion; Trustees Jas. Gibson's Estate, 2 and 3. Ram, lambd since 1st July in Previous Year.—John Taylor, Winton, 1, 2, 3, and Ludbrook Cup; H. D. Whitchurch, Cambridge, 4. Pen of Two Rams, lambd since 1st July in Previous Year.—John Taylor, Winton, 1 and "Examiner" challenge trophy. Ewe, lambd before 1st January in previous year.—Trustees Jas. Gibson's Estate, 1 and 5; John Taylor, Winton, 2 and 4; Esk Estate, 3. Ewe, lambd between 1st January and 1st July in Previous year.—C. B. Grubb, Strathroy, 1 and 2. Ewe, lambd since 1st July in Previous Year.—Robert Taylor, Green Hill, 1; Esk Estate, 2; John Taylor, Winton, 3. Pen of Two Ewes, lambd between 1st January and 1st July in Previous Year.—C. B. Grubb, Strathroy. Pen of Two Ewes, lambd since 1st July in Previous Year.—John Taylor, Winton.

Special Classes.

Merino Ram and Its Progeny, defined as One Ram and One Ewe.—Trustees Jas. Gibson's Estate, 1; W. Gibson and Son, 2; John Taylor, 3. Champion Ram and Winner of the Cooper Sheep Dip Challenge Trophy, the John Taylor Memorial Prize, and the Tasmanian Woolgrowers' Agency's Challenge Prize.—John Taylor, Winton.

Reserve Champion Ram.—Trustees Jas. Gibson's Estate, Belle Vue.

Champion Ewe.—Trustees Jas. Gibson's Estate; Belle Vue.

Reserve Champion Ewe.—W. Gibson and Son, Scone.

British Live Stock Interests.

Owing to mail irregularity our London correspondent's letter under this head has unfortunately failed to come to hand in time for this issue. Letters despatched nearly a fortnight earlier than it have arrived in Melbourne to-day, 13th inst.

Action by N.Z. Aberdeen-Angus Association.

Alteration of Certificates.

Firm action has been taken by the New Zealand Aberdeen-Angus Association in connection with one of their members—Mr. D. G. Grant, of Mangatoro, Dannevirke, H.B.—for altering the official pedigree certificates of certain imported cattle. The alterations were as follows:—

Eerie—from 3rd March to 3rd July.

Pride of Dallas—from 16th March to 16th July.

Erma of Moyness 3rd—from February to 18th July.

They were therefore entered in the wrong classes at the shows.

The Aberdeen-Angus Association agreed that no one of these animals be allowed to compete or be exhibited at any show in the Dominion for three years; and that all trophies and prizes won at recent shows be refunded and re-allocated to other competitors.

The various A. and P. associations were circularised to the above effect, and at a committee meeting of the Dannevirke A. and P. Association a letter was received from D. G. Grant, of Mangatoro, forwarding a cheque for £4, in return of prize money won by him at the society's last show with Erma of Moyness 3rd and Pride of Dallas, Aberdeen-Angus cattle which the council had disqualified as he had altered certain dates at Liverpool to compare with the dates he had on the health certificates. The council seemed to think that he did this on purpose, but he did no such thing. It was certainly a mistake on his part, and the council were making him pay for it. They wanted him out of the show ring, as they found they could not beat his imported cattle.

The New Zealand Aberdeen-Angus Breeders' Association wrote regretting that Mr. Grant had been guilty of altering the official pedigree certificates of certain imported cattle, and recommending that none of these animals be allowed to compete in any showing in the Dominion for three years. The council had dealt with Mr. Grant in other ways, but they wished to recommend for the favourable consideration of the A. and P. Association the suggested penalties.

The president (Mr. R. S. Chadwick) said the members no doubt were fully conversant with this matter, and it appeared to him that the only course open to the association would be to uphold the Angus Breeders' Association.

Mr. R. E. Bunny: I don't think we can do anything else.

Mr. F. J. Knight: Mr. Grant says it was a mistake, but does he explain it?

The President: I could not say. I think it is a very unfortunate matter, as Mr. Grant is a very capable man amongst stock. He has made a slip and is now paying for it.

Mr. Knight: Has he been before the council?

The President: Yes; he has been given every facility for explaining his action.

Mr. Grant has also refunded his prize money to the Manawatu A. and P. Association (Palmerston N.), and in his letter states that he has fifteen head of Aberdeen-Angus cattle in preparation for the big spring show. It rests with the A.A. Council as to whether these will be allowed to be shown.

A Great Shire.

Blaisdon Draughtsman (32113.)

Blaisdon Draughtsman, whose photo appears on our cover this month, is one of the greatest Shire horses in England to-day. He is owned by Mr. F. W. Cope, and has been reserve in 1920 and 1921 to His Majesty the King's champion stallion Field Marshal 5th (35627), whose portrait was published in our last issue. Blaisdon Draughtsman is the truest type of the breed that it is possible to find. He possesses the fine true Shire character, a big masculine stallion, well proportioned in every way. He has good hard feet, wide coronets, clean flat hard bone, well turned limbs, with lovely silky feather. He is placed on short legs, with the most true hind leg, is deep in his heart, well ribbed, shoulders set well back, wide chest, wide breech, with short back and wonderful loin. Lastly, a beautiful mover, and a stallion with which it is hard to find fault.

He comes from typical Shire stock. His sire, Warton Draughtsman, was a gold medal winner at Wharfedale in 1909, and traces back through Tatton Friar to the celebrated

Harold blood. On the dam's side championship honours can be claimed through descent from Hitchin Conqueror, awarded the supreme rosette in London in 1890.

Stud Stock Notes.

CATTLE.

Mr. John M. Chisholm, Wantalayna, Q., reports having sold 8 Aberdeen-Angus bulls to Mr. A. W. Cook, Arrolla Downs, all by the imported bull Tattoo.

"The Shorthorn World" reports that Messrs. L. Smith and Sons, St. Cloud, Minn., U.S.A., have sold their imported Shorthorn bull Royal Cup to Mr. Fred Lee, Britton, S.D., for £1500.

Mr. E. Lloyd Jones has just imported from America for his Bundanoon stud a young Friesian bull named Chinook Segis Pontiac David, bred at the Washington Agricultural College.

Mr. E. Lloyd Jones, Hambledon Hill, Singleton, N.S.W., writes that he has sold his white Shorthorn bull Bolinda Duke of Derri-mut 425th to the Metropolitan Board of Works, Werribee, Victoria, at a satisfactory price.

Mr. Horace Hale, of Kingwood, Findon, England, reports "The Daily Mail," has sold his British Friesian bull Hedges Second Series to Mr. F. Sykes, of Sussex, for £10,000. This, we believe, is the record price paid for a Friesian bull in Great Britain.



SHORTHORN BULL, CUDHAM PURE GOLD.

Bred by W. A. Maconochie, Cudham Court, Kent, England, imported to New Zealand by the Trustees of the Knapdale Estate, and purchased at Knapdale dispersal sale by Messrs. J. and W. Millar, of Kara Stud Farm, Whangarei, Auckland, for 450 guineas.

Mr. C. E. McDougall, Lyndhurst, Warwick, Q., has sold 1 stud Shorthorn bull, paddock fed, at 100 guineas, to Messrs. John Collins and Sons; 1 selected herd bull at 40 guineas to Messrs. Warner Bros. and Siddons; 1 stud bull, paddock fed, at 100 guineas, and 6 stud heifers, paddock fed, at 50 guineas to the Western Australian Government.

It was stated in last month's issue that Mr. John Melrose, Mt. Pleasant, S.A., had purchased the Milking Shorthorn bull Royal of Arrawatta from Mr. Peter Bowling, of New South Wales. We are now informed that Mr. Robert Melrose, of Mt. Pleasant, was the purchaser, and regret that the error should have been made. Apart from Royal of Arrawatta, bought for 155 guineas, Mr. Robert Melrose also purchased Chorus Boy for 60 guineas at the Arrawatta dispersal sale, and five cows.

At the dispersal sale at Invercargill (N.Z.) of Mr. C. E. Robertson's Friesian herd there was a large attendance of buyers, including well-known North Island breeders. The whole herd averaged £70 per head, the cows averaging just on 75 guineas, bull calves 40 guineas, heifer calves 80 guineas, and yearling heifers 73 guineas per head. The top price for a cow was 156 guineas, and her four months old heifer calf made 100 guineas, while another heifer calf of the same age realised 106 guineas.

Archer Bros. Limited, Gracemere, Q., report the following recent sales:—Stud Hereford bull Namesake 1st, four years old, by Prince Permean from Nameless 1st, to Mr. J. N. Murray, Hybla, Boyne Valley; also at auction 7 Hereford herd bulls. In addition, Archer Bros. Limited sold to Mr. A. Haly, acting on behalf of the Western Australian Government, 19 stud Shorthorn heifers by

Gramplan Lord Fashion, Nyngay Wide 2nd, and Count Rockingham 5th; 13 heifers from dams entered in the Shorthorn Herd Book, and 6 heifers from dams entered in the appendix S.H.B. These are a very fine lot of heifers, and should leave their mark in the W.A. Government herd. They are descended from the Gracemere, Canning Downs, and Glengallan studs.

The annual meeting of the Coonamble (N.S.W.) Shorthorn Breeders' Association was held last month, when the following officers were elected:—Patron, Mr. J. Jones, Bullagreen; president, Mr. O. E. Friend; vice-presidents, Messrs. J. A. Feehan and A. E. Hardy; committee, Messrs. A. M. Ibbott, B. H. Oxlade, R. V. Hole, N. Jones, A. B. Fisher, H. C. Mackay, J. B. Peacock; hon. treasurer, Mr. A. H. Oliver; hon. secretary, Mr. R. V. Hole; assistant secretary, Mr. C. G. D. Allman. The late hon. secretary (Mr. E. L. Ryder) was elected a life member. It was decided to add a prize at next show for bulls over three years, together with two of their progeny under twelve months. For this Mr. J. Jones donated a prize of £10 10s., and the association will add a cash sum of similar value. The trophy is to be won twice.

SHEEP.

Mr. A. H. Buckland, Gumble, N.S.W., reports having sold the whole of his Corriedale stud flock to Mr. M. Carroll, of Redbank, Molong, N.S.W.

Messrs. H. C. and R. M. Hawker, Bungaree, Clare, S.A., report having sold 100 selected Merino rams to a Western Australian buyer and 840 second stud ewes to a South Australian buyer during May.

At sales of imported Lincoln sheep held at Buenos Aires in March, the top price realised was £175 for a ram bred in England by Mr. T. Casswell. This equals the figure obtained for a New Zealand-bred ram in February.

At the Longreach (Q.) Show, held the beginning of May, the A.M.L. and F. Company Limited (Retro), Melbourne Trust Limited (Strathdarr), and Messrs. Edkins, Campbell and Co. (Bimbah) divided the prizes for Merino sheep.

Mr. H. H. Dutton now advertises his Anlaby Merino stud in The Review. The sheep are bred under natural conditions in the Kapunda district, and are large-framed, plain-bodied, and sound-constituted. Mr. Dutton has selected and flock rams for sale.

Yet another of the famous fine-wool Merino flocks of Victoria was broken up last month at the dispersal sale of Mr. C. P. Davis' Mount Camel flock. The wool from Mount Camel has a world-wide reputation, having been awarded a Grand Prix at both Paris and Buenos Aires, besides always realising very near top prices at auction.

Mr. Pat Osborne, Willeroo, Tarago, N.S.W., advises having sold to the South African Government the following stud Romney Marsh sheep:—1 2-tooth ram at 100 guineas and 10 2-tooth ewes at 10 guineas each. Mr. Osborne has recently purchased a Romney Marsh stud ram from the well-known flock of Mr. Arthur Finn Westbroke, Lydd, Kent, England, and another ram from Mr. H. B. Amos, Ashford, Kent, England. These rams are now on the way to Australia.

There was a large attendance of Western District breeders and stock buyers at the dispersal sale of the Mt. Violet (Vic.) Merino flock and stud, held on account of the executrix of the late John Cumming on 12th May. Taking into consideration the low prices for wool and the dry condition of the country at the time, the sale, in the opinion of those present, was quite successful. Stud rams sold to 3 guineas and ewes to 43s. The auction was conducted by Messrs. Stansmore and Co., Camperdown, in conjunction with Messrs. Crawford, Dowling and Seymour, Ballarat.

The Victorian Producers' Co-operative Company Limited announce that they will hold a public auction of stud sheep in their wool stores adjoining Macaulay Station, 1½ miles from Melbourne, on Wednesday, 3rd August. British breeds are to be sold in the morning and Merinos in the afternoon. The company by means of an advertisement appearing in this issue sets out at length the reasons which actuated it in changing the date of its stud sheep sales from September, during the Royal Show week, to August, immediately following the Australian Sheep-breeders' Show.

Exhibitors are reminded that entries for the Australian Sheep-breeders' Association's Show (to be held on 1st and 2nd August at Goldsbrough, Mort and Co.'s stores, Melbourne) close on 7th July at the office of the association. Entry forms and prize lists (classes being provided for Merinos, fine, medium and strong wool, and small owners' section, British breeds, Corriedales and Polwarths, sections for non-competitive Merino entries and Merino rams sweepstakes) may be obtained from the secretary, Mr. Leslie Smith, at the "Rialto," Collins-street, Melbourne. The system of single judging will again be followed for all classes.

Mr. Claud H. Suttor reports the following sales of stud and flock Merino rams and selected ewes from the Curranyalpa stud, New South Wales:—12 stud rams to Mr. D. Draffin, of Lisgar, Parkes; 30 flock rams to Mr. J. Mungovan, Bourke; 10 do. to Mr. J. R. Butler, Cobarr; 10 do. to Mr. S. McKibbin, Bathurst; 32 do. to Mr. L. C. Terry, Bathurst; 6 do. to Mr. K. Churches, Bathurst; 7 do. to Messrs. Cousins and Co., Bathurst; 600 selected ewes to Mr. D. Draffin, of Lisgar, Parkes. Mr. Suttor also advises the following sales of flock rams from the Bruceedale Stud, New South Wales:—10 to Mr. G. Sutherland, Gowan; 3 to Mr. J. Glazebrook, Rockley. The balance of the rams bred at Bruceedale were reserved for station use.



A GROUP OF STUD LINCOLNS.

Champions of Southern Riverina and North-east Victoria. Bred by Messrs. J. R. C. Sadler and Sons, Springfield Park, Glenrowan, Victoria.

Mr. R. J. Fagan, of Sunny Ridge, Mandurama, N.S.W., recently purchased the whole of the Merino stud flock retained by Mrs. G. R. Jackson, of Urangeline, N.S.W., when the major portion of that property was bought by the Government some time ago. The sheep retained by Mrs. Jackson comprised practically the cream of the old stud, Wanganella and Bundemar blood predominating, and it is these that have been transferred to Sunny Ridge, including extra special, special, first and second stud, classed ewe hoggets and ewe weaners, and the special stud rams. The price paid was a big one, and the total number of ewes purchased was 1197. The stud, rams from which have always commanded a ready sale, has been classed for years by Mr. H. C. Pennefather, who will continue the work for Mr. Fagan. Urangeline rams are still available, as the stud has only been transferred in toto to Sunny Ridge. Previous to this purchase Mr. Fagan had bought a number of special and first stud ewes from Urangeline. His leading sire is Gollath, the ram that excited such favourable comment at the Sydney sales last year, and a full-page picture of whom appeared in our July 1920 issue. He was bought by Mr. Fagan from Mr. Walter Hawker, of Anama, S.A., for 1500 guineas.

LITTLE'S DIPS

POWDER AND FLUID.

Kill Ticks, Lice and their Eggs. Prevent the Fly.

USE LITTLE'S FLUID DIP FOR DRENCHING FOR LUNG AND INTESTINAL WORMS.

MORRIS, LITTLE & SON (For. & Col.) LTD.
Melbourne and Sydney.

The Pastoral Finance Association, Sydney.
H. Donkin & Son, Queen Street, Brisbane.
Goldsbrough, Mort & Co. Ltd., Rockhampton.
Barns, Philip & Co. Ltd., Townsville.
Geo. Ferguson & Co., Port Adelaide.
Henry Wills & Co., Fremantle and Albany.
De Garis Sons & Co. Ltd., Narracoorte, S.A.
AND ALL STOREKEEPERS.

Lands.

Pastoral Rents.

Répudiation Act in Queensland.

A different note was struck by Mr. P. W. Shannon, a member of the Queensland Land Court, in delivering his decisions on 30th May regarding cases heard at Springsure and Clermont, to what had been stated by the court at other times, the drop in pastoral products having been responsible. If this fact has influenced the court it may be asked what is the position of those lessees who had their rents fixed while the boom was on?

The lessees contended that the Commissioners' valuations were excessive, being based on boom conditions; that it was just as equitable to ask the court to base its determinations on values during a period of inflation as it would be to ask that they be based entirely on the low prices now obtainable for stock and pastoral products; that in some cases the Commissioners' valuations were in conflict with the rent of comparable lands in the same locality, and particularly with rents obtainable for selections on the resumed parts of the holdings in question, and that the valuations were inconsistent with the rents determined in better holdings in more attractive districts.

The Crown denied that the valuations were based on boom conditions, but contended that they were based on the fact that the rents were for a period of ten years; that the period of low values had been too brief to warrant any modification of the Commissioners' valuations, and according to competent opinions, was not likely to be prolonged; that the valuations were supported by the rents which selectors with experience were paying; that where selectors were rented at less than the valuations on a holding the selectors' lands were of inferior value, and that the rents of particular selections cited by the lessees for purposes of comparison had been fixed in the Minister's notification opening these lands for selection at below value rates, as was proved by the large number of applicants.

Mr. Shannon said he had given attention to the evidence; to the requirements of section 125; to the conditions which had obtained during the part of the assessment period which had already expired in each case; to the present pastoral outlook and the general circumstances under which the rents were determined, and he had reached the conclusion that only in a comparatively few cases could the Commissioners' valuations be sustained. It was only fair to say that the task of the assessing Commissioners in these cases was more than ordinarily difficult, as not only did the holdings dealt with differ greatly in character and circumstances, but the rental value of leased lands in the districts under notice was not nearly so well established as in some parts of the State.

Details of the assessments:—

CASES AT SPRINGSURE.

Pastoral Holdings.

In the cases of May Downs, Planet Downs, and Shotover, which were cases of review under the provisions of the Land Act Amendment Act of 1920, he considered that the rent already determined was less than a sufficient rent, and he determined the rent afresh at the rate stated below in each case respectively:—

Holding.	Rent for 1st period.	Rent previously determined for 2nd period.	Assessing Com.'s Valuation.	Court's Determination afresh.
	s. d.	s. d.	s. d.	s. d.
May Downs ..	17 4	26 0	57 0	45 0
Planet Downs ..	21 0	31 6	50 0	40 0
Shotover ..	7 0	10 6	22 6	20 0

In the following cases the rent was determined at the rate stated in each case respectively:—

Leichhardt District.

Holding.	Rent for 1st period.	Assess. Com.'s Valuation.	Lessees' Valuation.	Court's Determination, 2nd period
	s. d.	s. d.	s. d.	s. d.
Meteor Creek ..	20 0	39 0	—	30 0
Dunblane ..	12 0	55 0	—	40 0
Orion Downs ..	32 0	80 0	30 0	70 0
Broughton ..	80 0	100 0	50 0	80 0
Arcturus Downs ..	24 0	90 0	—	70 0
Comet Downs ..	16 6	49 6	—	37 6
Kenmare ..	15 0	44 0	—	28 0

CASES AT CLERMONT.

In the cases of grazing selections 175 and 186, which are cases of review under the provisions of the Land Act Amendment Act of 1920, it was considered that the rent already determined for the third period of the respective leases was not less than sufficient.

In other cases the rents were determined as stated below in each case, respectively:—

Pastoral Holdings.

South Kennedy District.

Holding.	Rent for 1st period.	Assess. Com.'s Valuation.	Lessees' Valuation.	Court's Determination, 2nd period.
	s. d.	s. d.	s. d.	s. d.
St. Anns ..	20 0	65 0	30 0	45 0
Huxley ..	15 0	23 4	22 6	23 0
Scartwater ..	22 6	71 8	33 9	50 0
Yacamunda ..	12 0	52 6	18 0	37 6
Serpentine ..	10 0	45 0	15 0	32 6
Bullwallah ..	15 0	51 8	30 0	37 6
Mount Douglas ..	16 0	37 6	20 0	42 6
Stratford ..	15 0	53 10	15 0	40 0
River Downs ..	12 0	26 0	20 0	26 0
Kilcummin ..	20 0	73 0	20 0	55 0
Logan Downs ..	35 0	53 7	40 0	53 6
Glenmore ..	25 0	80 0	—	55 0

Leichhardt District.

	s. d.	s. d.	s. d.	s. d.
Batheaston ..	12 0	42 6	12 0	30 0
Warwick ..	12 0	42 6	12 0	30 0
Leichhardt Downs ..	20 0	51 0	20 0	40 0
Illey ..	15 0	55 3	17 6	42 6
Vermont ..	15 0	71 6	—	55 0
Exeter Downs ..	15 0	65 0	20 0	50 0
Grosvenor Downs ..	18 6	75 2	18 6	55 0
Denham ..	15 0	68 4	15 0	40 0
Malvern Downs ..	24 6	85 0	24 6	62 6
and Talgai ..	17 6	56 3	17 6	40 0
Bundooora ..	20 0	77 4	20 0	62 6
Booroodara ..	15 0	51 3	15 0	40 0
Wyndham ..	30 0	60 0	30 0	50 0
Gordon Downs ..	25 0	106 8	35 0	80 0
Blackadder ..	45 0	153 4	45 0	100 0
Wolfang ..	43 0	113 4	43 0	85 0
Huntley ..	20 10	41 0	20 10	37 6
Prairie ..	15 0	41 0	15 0	35 0
Prairie South ..	45 0	160 0	45 0	100 0
Retro ..	25 0	60 0	37 6	50 0
Bathampton ..	17 0	70 0	17 0	52 6
Cotherstone ..	20 0	52 0	20 0	35 0
Menzies ..				

Land Sales.

NEW SOUTH WALES.

Coolatai Station, Warialda, has been bought by Mr. Thomas Walker from the Walker Trustees. The property consists of 7470 acres, with about 6800 sheep.

Guntiahah, 3800 acres C.P. and C.L. land, in the Coonababran district, owned by Mr. J. O'Brien, has been purchased by Mr. H. M. Carter. Pitt and Eastway, Sydney, were the agents.

Coromandel, situated about 7 miles from Wilcannia, containing 37,996 acres of western land lease and freehold, has been sold by Exors. F. Mitselburg to Mr. John Andrews, Purnawilliah, Wilcannia.

VICTORIA.

Pretty Pines Estate, near St. Arnaud, has been sold by Messrs. Marchmont Bros. to Mr. H. McNeill, of Kerang.

Werribee Park Station Homestead, the property of Mr. G. T. Chirnside, together with 2173 acres, has been sold to Mr. Phil Lock, of Warrnambool.

QUEENSLAND.

Khorassan, situated in the Hughenden district, comprising 19,662 acres grazing farm, has been sold by Miss Dorothy Jowett to Mr. R. Magoffin.

Hyde Park, situated in the Jericho district, comprising 9251 acres grazing farm, has been sold by Mr. William Fumher to Messrs. W. J. and P. Ogden.

Portion of Merlin, situated in the Prairie district, comprising 25,623 acres grazing homestead, together with 4000 sheep, has been sold by Messrs. Allen Bros. to Messrs. Wilks and Mitchell.

Fyrish, situated in the Bell district, Darling Downs, comprising 3800 acres freehold, has been sold by the Estate of the late Llewelyn A. Walker and Alex. G. Walker to Mr. Roy Murray.

In the report of the sale of **Kirrewah**, Roma, that appeared last month, it was stated in error that the station had been sold by Mr. Philip Hoskin to Mr. R. J. Calder. It should have read the other way round, Mr. Calder being the vendor and Mr. Hoskin the purchaser.

SOUTH AUSTRALIA.

Haylands Station, Wood's Flat, has been sold by Mr. G. R. Aldridge to Messrs. Winnall, Bosse and Winnall.

Record.

The Graziers' Association of New South Wales. Annual Conference.

The fourth annual conference of the Graziers' Association of New South Wales was held in the sale room, Royal Exchange, Sydney, on 24th to 26th May (inclusive), and was followed on the 27th by the annual general meeting of the association.

There were 114 accredited representatives, including members of council, and the president, Mr. John Mackay, occupied the chair.

In the course of his annual address he went at some length into the shearing question, and traversing the course of events last year, when the association fought the 44-hour week, said:—

"The volunteer system, by which it was hoped to provide a considerable number of shearers, was only partially successful, as the unreasonable course adopted by the union could not be fully anticipated, and the trouble consequently eventuated before organisation was complete. Full credit must, however, be given to the volunteers, who secured excellent results in some districts, thus giving proof that earnest organisation upon such lines is capable of meeting future difficulties, provided that primary producers stand loyally together for their self-protection when attacked on illegal and unreasonable grounds. Last season's experience proved that it is futile to rely upon securing a sufficient supply of union labour in opposition to the union policy, even though that policy be not favoured by the men, or be illegal and unreasonable, and a successful stand in the future can only be made by new means of organisation, such as are indicated in the proposals which are being submitted for your consideration. It is gratifying to realise that the Federal Parliament has now considerably strengthened the Commonwealth Arbitration Act in directions which experience has shown to be necessary, and it is not too much to say that had the protection now given by the Act been available last season, our difficulties would probably have been overcome, and our policy maintained.

"New claims have now been put forward by the A.W.U., which it is anticipated will very shortly be dealt with by the Commonwealth Arbitration Court, and the association is taking all possible steps to present a strong case on behalf of its members, and to obtain an early award. With the lower values ruling for wool and meat, and the cost of living coming down, we naturally anticipate a lower price for shearing. The courts in the past have fixed the price of labour without any regard to what an industry can afford to pay. The result of this policy is that some industries are now closing, and many more are likely to follow.

"The rural industries differ essentially from other industries, as the 'keep' of workmen is usually found by the employers, and

in most cases the profits of the landowner are not such as to justify the payment of a high cash wage in addition to such keep. Our soldier settlers, and others who are seeking to establish themselves upon the land, undoubtedly find the existing high wages a serious obstacle, preventing them from carrying out necessary improvements, and, at the same time, earning a livelihood. I think the rural industries of Australia would be in a more prosperous condition to-day, and would provide a much wider field of employment for a greater number of workers if our industry had not been hampered by awards which have been a drag upon employment, and which have been a factor in destroying the spirit of goodwill which prevailed prior to the advent of Arbitration Courts and awards. So long, however, as arbitration remains the policy of the country, we will loyally adhere to it, and endeavour in every way to make it a success.

"With the lower prices ruling for wool and meat, the burden of railway freights is at present a very heavy one, and we are faced with the unpleasant prospect of even higher freights being imposed if the 44-hour policy of the Government is applied to the railways. Even now it is found quite unprofitable to send skin and hides to market from long distances, as the whole of the return, and more, is absorbed by railage and other charges. As the low prices realised for stock should mean a consequential advantage to the consuming public, it is but equitable that the existing freights should be reduced by a charge upon the general revenue, and this association will be represented upon a deputation which is being organised by the Producers' Associations' Central Council to urge this proposal upon the Minister for Railways."

During the conference short addresses were delivered by Dr. Earle Page and Mr. W. E. Wearne, leaders of the Federal Country Party and State Progressive Party respectively; by the Chief Railway Commissioner, Mr. James Fraser, and by Dr. Ray on the question of combating pests by suitable micro-organisms.

A number of matters of vital interest to pastoralists were dealt with, the range of subjects including organisation, railways, pastoral award, political, taxation, wool, stock stealing, pest destruction, &c.

It is impossible to adequately summarise all the resolutions passed at the conference, but amongst the more important were the following:—

Organisation.

Amalgamation of Primary Producers.—(a) "That this conference highly appreciates the closer unity on the part of primary producers which has within recent years been achieved through the establishment of the Producers' Associations' Central Council, and considers that it is desirable that a still closer unity should be brought about by a definite amalgamation of all associations representing primary producers in New South Wales; with this end in view the conference extends a very cordial invitation to the Farmers' and Settlers' Association of New South Wales, the Primary Producers' Union, the Stockowners' Association of New South Wales, the New South Wales Sheepbreeders' Association, the Pastoralists' Union of Southern Riverina, and the Pastoralists' Association of West Darling to appoint representatives to meet representatives of this association for the purpose of discussing the advisability and practicability of bringing about an amalgamation of these organisations, and the terms upon which such an amalgamation could be effected."

"That realising the disadvantage of having three associations of graziers with differing policies in the one State, this conference supports an amalgamation of West Darling and Southern Riverina Associations with the New South Wales Association, thus securing uniformity of policy, and that the secretary write to the presidents of the West Darling and Riverina Associations enclosing a copy of this resolution, and requesting them to take a vote of their members on this proposal."

Railways.

Railage of Live Stock.—"That owing to the low prices now obtainable for sheep and cattle, and the extremely low price of wool, the executive be asked to interview the Railway Commissioners and the Government with a view to having the high freights now charged for cattle and sheep vans and the carriage of wool substantially reduced."

Light Railways.—"That the executive be asked to take up with the Government the matter of constructing light railways throughout the State."

Appreciation of Railway Service.—"That this conference desires to express its great appreciation of the sympathetic and generous treatment accorded by the New South Wales Railway Commissioners to graziers throughout the recent drought period in the carriage of live stock and fodder."

Pastoral Award.

Hours of Work.—"That this conference protest against any reduction of the 48-hours award for shearing."

Taxation.

Averaging System.—"That this association press for an early adoption of the five-year average as a basis for State and Federal income tax."

Postponed Payment of Taxes.—"That in view of the present condition of the pastoral industry, and of the fact that where mixed farming is not carried on many graziers have had absolutely no income whatever for the past nine months, this conference considers that the Federal and State Governments should allow an extension of six months free of interest for payment of land and income taxes on pastoral properties."

P.P. Act, &c.

Shire Rates.—"That this conference enters an emphatic protest against the Minister instructing the shire councils to strike a higher rate than they consider necessary."

Pest Destruction.

Blow Flies.—"That this conference is strongly of opinion that bacteriological research for means of eradicating the blow fly should at once be undertaken, and that the Federal Government be urged to give immediate effect to this proposal, and that a deputation be appointed to present this proposal to the Government, the support of the Federated Associations to be invited."

Rabbits.—"That the Federal Government be requested to arrange for thorough scientific investigation with a view to the propagation of suitable diseases for the extermination of rabbits."

Noxious Weeds.—"That this conference request the Minister for Agriculture to introduce a Pure Seeds Bill into Parliament during the coming session."

"In view of the alarming increase of noxious weeds in this State, the administration of the Noxious Weeds Act be placed in the hands of the P.P. Boards, as it is considered that these boards are the most interested and capable bodies to administer that Act."

Shearers' Accommodation Act.

"That this conference views with disfavour the suggestion of the A.W.U. that police inspectors now employed to inspect shearers' accommodation be dispensed with, and that shearers' representatives be appointed in their place, as it is regarded of importance that such duties should be discharged by disinterested persons, and that a deputation from this conference interview the Government and urge the matter."

ANNUAL MEETING.

On the following day, Friday, 27th May, the thirty-first annual general meeting of the association was held, when there was a large and representative attendance of members, Mr. John Mackay (president) presiding. The secretary's annual report was then presented, and, with the financial statement and balance-sheet, adopted. A number of important matters were dealt with in the report, all of which have been given publicity in these columns during the year. With further reference to the shearing question, the secretary said:—

"Last season's experience has indicated that organisation upon new lines will have to be adopted in order to successfully withstand any demands which the union may in future make in excess of the terms of the existing award, and to meet any attempts which may be made to rely upon direct action instead of arbitration. By direction of your executive I attended meetings of members at thirty country centres towards the end of last year, and submitted for consideration suggestions which have subsequently been brought before the Council and local committees, and which will be further dealt with at the fourth annual conference. The proposals aim at the organisation of volunteer labour from the ranks of primary producers to undertake the shearing if members of the union refuse to work upon award terms, there being no intention that the volunteers should be called upon so long as unionists are prepared to work upon such terms. The second proposal (which is not alternative, but rather correlative, to the volunteer movement) is for the establishment of an indemnity fund to reimburse members the losses which may be sustained by them through adherence to the policy of the association."

In regard to the Graziers' Co-operative Shearing Company, the report also stated:—

"The Graziers' Co-operative Shearing Company Limited was established at the instance of this association in 1918 for the purpose of assisting members in the carrying out of their shearing, and particularly with a view to improving the standard of work and providing for better organisation and greater continuity of employment of employees. Although the company was unfortunate in commencing its operations in a year in which drought and influenza very considerably interfered with arrangements, and in encountering industrial difficulty in the following year through the demands of the A.W.U. for a 44-hour shearing week, its record must be considered satisfactory, as in 1919 it conducted shearing

operations at forty sheds, totalling 702,530 sheep, at an average cost of 7½d. per sheep, including overhead charge, and incidentally produced eighty good learners. In 1920 shearing operations were conducted at fifty-four sheds, totalling 889,341 sheep (including twenty-five sheds upon the 48-hour terms, twelve of the remaining sheds being in the Southern Riverina district, where the 44-hour terms had been conceded). The average cost of shearing was 11d. per sheep, and 150 learners were taught to shear."

The following members of Council were elected for the ensuing year:—Armidale, Messrs. J. S. Crapp and F. B. Fleming; Bathurst, H. C. Suttor; Bombala, J. B. Sautelle; Bourke, J. Leigo and F. H. Coward; Carcoar, A. W. Whitney; Cobarr, E. Killen; Condobolin, J. T. Gavel; Coonabarabran, W. Hosking; Dubbo, F. Mack; Forbes, Wallace Hunter; Goulburn, W. D. Gordon; Gundagai, C. G. Waddell; Hunter, Hon. J. C. White, M.L.C., and A. B. Bettington; Brewarrina, G. N. Magill; Coonamble, O. E. Friend; Hay, G. T. Esplin; Hillston, S. M. Osborne; Inverell, A. F. Kemp; Metropolitan, S. McCall-McCowan; Monaro, W. W. Hedges; Molong, Dr. N. W. Kater; Moree, L. Manchee and W. B. Newcomen; Mudgee, W. S. Suttor; Narrabri, Colin A. Sinclair; Narrandera, W. W. Killen; New England, A. F. C. Rogerson; Northern Rivers, J. B. McDougall; Tamworth, I. W. Onslow Thompson, J. H. Wilson, and F. T. Payne; Wagga, W. M. Hammond; Walgett, J. Peacock and V. Williamson; Warialda, H. R. Munro and H. S. McMaster; Yass, W. T. Merriman; Young, Sir W. Fairlie-Cunninghame; Canonbar, James Walker.

Messrs. W. F. Jaques and Duncan Carson were elected as trustees of the association, and Mr. F. H. Rayment, F.C.P.A., was reappointed auditor.

Discussion on matters of interest to members took place, and the following resolutions were unanimously carried:—

"That this conference, recognising the difficult financial position of many graziers, recommends the Council to go fully into the subject of endeavouring to evolve some method of assisting graziers in their difficulties."

"That this annual general meeting of members of the Graziers' Association of New South Wales urge upon the Government that owing to the desperate financial position of many of our smaller graziers it is imperative that assistance be given to them, and recommends that the balance of money raised for the assistance of necessitous farmers be made available through the Rural Industries Board."

Immediately after the annual meeting a special meeting of the elected members of the Council was held for the purpose of appointing ten additional members under the provisions of rule 32, with the result that the following were elected:—Messrs. B. B. Allen, C. M. Buck, J. B. Cramsie, F. B. S. Falkiner, A. E. Hunt, M.L.C., A. F. Manchee, A. G. Manning, Jno. Mackay, A. H. Moore, and T. L. F. Rutledge, M.L.A.

COUNCIL MEETING.

In the afternoon the quarterly meeting of the Council was held, with an attendance of forty-one members, Mr. John Mackay presiding.

The following office-bearers were elected for the year:—President, Hon. A. E. Hunt, M.L.C.; vice-president, Mr. John Mackay; hon. vice-presidents, Mr. O. E. Friend and Dr. N. W. Kater; Treasurer, Mr. C. M. Buck; executive, the foregoing officers and Messrs. B. B. Allen, J. B. Cramsie, and A. G. Manning. Mr. A. Vickery was elected an additional member of the Council. Hon. A. E. Hunt, Mr. J. Mackay, and Dr. N. W. Kater were elected as the association's representatives upon the Producers' Associations' Central Council. Hon. A. E. Hunt, Dr. N. W. Kater and Messrs. Jno. Mackay, O. E. Friend, and F. B. Fleming were chosen to represent the association upon the Central Council of the Progressive Party. Mr. C. M. Buck was appointed to represent the association upon the Council of the Employers' Federation with Hon. A. E. Hunt and Mr. O. E. Friend to attend general meetings of the Federation.

In accordance with the suggestion made by the annual conference with representatives of kindred organisations with a view to amalgamation, Hon. A. E. Hunt, Messrs. J. Mackay and C. A. Sinclair were appointed to represent this association.

A sub-committee, consisting of Col. T. L. F. Rutledge, Messrs. J. S. Crapp, S. M. Osborne, N. W. Kater, and A. G. Manning, and the president and vice-president were appointed in accordance with the annual conference suggestion to investigate and report upon matters pertaining to closer settlement.

Correspondence was submitted relative to Customs tariff, shearing rates and conditions, selling cattle by live weight, insurance against drought, and industrial disputes and inquiries, and reports were submitted of the thirty-second convention of the Graziers' Federal Council of Australia, a conference recently held between representatives of this association and the Southern Riverina and West Darling Associations, Queensland basic wage

judgment, and regarding the Queensland stock embargo case. It was reported that since the previous meeting 177 new members had been admitted by the executive, while 80 resignations had been accepted, mainly due to disposal of property.

The date of the next Council meeting was fixed for Wednesday, 27th July.

Pastoral Industry and A.W.U. Claims. Compulsory Conference.

Representatives of the Graziers' Associations of New South Wales, Victoria, West Darling, Southern Riverina, and Tasmania, on the one hand, and delegates from the Australian Workers' Union, on the other, attended a compulsory conference, called by the Deputy President of the Arbitration Court (Mr. Justice Powers) on 9th inst. The object of the conference was to endeavour to reach an agreement on wages rates, hours, meat prices, and other matters affecting the pastoral industry.

After two days' consideration of the claims of the union the parties reported to Mr. Justice Powers that there was no chance of an understanding being reached on the main question of rates of pay, hours, and meat prices, and they asked him to refer the matter into court for immediate hearing, if possible. Both sides emphasised the desirability of an early hearing, because of the approach of the shearing season.

Mr. Justice Powers promised to try to facilitate an early hearing by the court.

Representing the Graziers' Associations were:—Messrs. J. S. Crapp and J. W. Allen (N.S.W.), I. J. Warnes (S.A.), E. F. Chomley (West Darling), A. S. Austin (Southern Riverina), H. M. Turner and Leslie Smith (Vic.), and R. C. Field (Tas.). Representing the Australian Workers' Union: Messrs. A. Blakeley, M.P., F. W. Lundie, W. H. Lambert, R. Cole, J. McNeill and J. Barnes.

Shearers' Wages.

No Increase in Queensland.

The President of the Arbitration Court in Queensland has had before him a claim made by the A.W.U. for a substantial increase in wages and improvement in conditions. The amount asked for shearing was £3 per 100. On the other hand, the United Graziers' Association suggested a decrease in wages in view of the depression in the industry.

A preliminary objection by the association was made to the claim being heard in view of the claim before the Federal Arbitration Court. The union representative held that the Federal award would not involve Queensland, as it would be applied only to the other States. The judge decided to hear the claim, and said that a variation could be made after the Federal award had been given.

During the hearing the question of the prosperity of the industry, which has an important bearing on awards made by the Queensland court, was discussed, and Mr. Edkins, who conducted the case for the association, pointed out that sheep had fallen 50 per cent. or more in value, and in eight months only 377,000 bales of wool had been sold as compared with 1,412,000 bales during the eight months preceding the court's last award. The grazing industry in Queensland had lost from £25,000,000 to £30,000,000, the value of sheep, wool, and products being considerably below the 1917 parity. The taxation of the pastoralists had gone up from £105,000 to £452,066 per annum.

The president subsequently delivered his judgment, in which he said that he was satisfied that the award he made in June last year should stand, with no alteration in wages and with only minor alterations in conditions. He had been guided by the fact that in 1907 Mr. Justice O'Connor had fixed the wages of shearers at 24s. per 100; the 40s. which he (Mr. Justice McCawley) fixed in 1920 had no greater purchasing power than the 24s. in 1907. The application to reduce the wages to the 1917 level would have been tantamount to reducing them below the effective wage of 1907. Whether, when the cost of living fell, the wages paid in this industry should be reduced, would be determined by the court when the occasion arose, but the United Graziers' Association should understand that any

request that the court should reduce them before that event should be supported by reasonably full and reliable statistics of the average cost of production, proving that the industry was unable to bear the prescribed wages. After a succession of years of plenty one lean year could not be relied on to justify a reduction in wages in the absence of proof of a substantial reduction in the cost of living or that the industry cannot pay the existing wages.

His Honour, in reading the decision of the court, said that when fixing the wages for station hands in October 1918, he had been influenced by the then prosperity of the industry. At that time, although the minimum generally recognised by the court was about £3 4s. per week for the south-eastern district, the court had fixed £2 13s. per week and kept as the wages for station hands in the eastern portion of the State. In June 1920 the minimum wage had increased to £3 17s. per week, but the court, taking into consideration the argument that the industry was not so prosperous, had fixed the wages at £3 for the eastern division. The basic wage had now been fixed at £4 5s., but he thought that on the whole, having regard to the present condition of the industry, particularly cattle raising, he was justified in refusing any increase in wages. On the other hand, he thought that no sufficient case had been made out for a reduction of the existing wages. The only question that had occasioned him difficulty was the union's claim for preference. On the smaller grazing properties and for casual jobs it would hardly be workable; but when the award next came before the court an application limited to the larger stations might be considered.

Shearing Rates in New Zealand.

The following are the rates of pay for shearing and shed hands put before the Conciliation Council by the Canterbury Shearers' and Shed Hands' Union and the Canterbury Sheep-owners' Union of Employers:—

The following were the principal demands of the shearers:—

Hours of Work.—Forty-four per week, to be worked between 7.30 a.m. and 9.30 a.m., 10 a.m. and noon, 1 p.m. and 3 p.m., and 3.30 p.m. and 5.30 p.m. on Monday to Friday, and between 7.30 a.m. and 9.30 a.m., and 10 a.m. to noon on Saturday.

Rate of Pay.—(a) The rate for shearing by hand not to be less than £1 15s. per hundred, with rations; (b) shearing by machine not less than £1 15s. per hundred, with rations; (c) shearing lambs, not less than £1 15s. per hundred, with rations; (d) in cases where the shearers find themselves in rations, these rates to be increased by 6s. per hundred; (e) the rate of stud sheep to be settled by agreement between the employer and the shearer employed to do the work; (f) the rate of shearing rams over six months and double-fleeced sheep to be double ordinary rate.

Rates of Pay (Shed Hands).—(a) Pressers: By the week, £5; by the hour, 2s. 6d. Piecework, pressing: By hand, 1s. per cwt., or 3s. per bale; by power, 9d. per cwt., or 2s. per bale. (b) All other shed hands: By the week, £4 5s.; by the hour, 2s. 3d. (c) Youths under 18 years of age: By the week, £3; by the hour, 1s. 9d. Smoke ohs to be paid for as time worked. Equal pay to be paid to youths when they perform the same work as adults. (d) Cooks: For twelve men or under, £5 10s. Cooks' assistants, £5 per week. Where over twelve men are employed, cooks to be paid 7s. 6d. per week for each person over twelve in addition to the above rate.

Combs and Cutters.—In sheds where machines are used, the employer to find the necessary machinery and oil and combs and cutters. (a) Any shearer who uses a machine or duplicate other than that which is provided by the employer to be deemed to have committed a breach of the agreement, and to be liable. (b) Any employer who allows a shearer to use machinery other than that provided by the said employer to be equally liable.

Rations.—Where rations are to be provided by the employer, sufficient food of good quality to be supplied to the workers, and to include jam, pickles, sauces, green vegetables twice weekly, and not less than 2 lbs. of butter per week for each worker.

The employers filed the following counter-proposals:—

Hours of Work.—The hours of shearing to be from 5 a.m. to 5 p.m., or from 5.30 a.m. to 5.30 p.m., with intervals for meals and smoking as shall be mutually agreed upon between the shed manager and the shearers' representative. Shearing to stop at 4 p.m. on Saturdays, except in the case when forty-eight hours and twenty minutes' work shall have been done before noon, in which case work may be stopped then. When shearing wet ewes the shed manager may alter the intervals for smoking and extend the hours to the extent of half-an-hour, in order to complete the cut-out.

Rates of Pay.—(a) The rate for shearing by hand to be not less than £1 per hundred, with rations; (b) the rate for shearing by machine not to be less than £1 per hundred, with rations; (c)

the rate for shearing lambs not to be less than £1 per hundred, with rations; (d) in cases where shearers find themselves in rations these rates to be increased by 4s. per hundred.

Rates of Pay (Shed Hands).—(a) Pressers, when engaged by the week, £2 2s. 6d. per week, or by the hour 1s. 3d.; (b) all other shed hands, when engaged by the week, £2 per week, or by the hour 1s. 2d.; (c) cooks for twelve men or under, £3 per week. Cooks' assistants, £2 per week. Where over twelve men are employed, the wages to be by agreement between the employer and the worker, but not in any case less than a minimum of £3 per week.

Similar demands and counter claims have been made in other parts of New Zealand, and in all cases were referred to the Arbitration Court.

Later.—The Arbitration Court has delivered the following judgment in the dispute between the Canterbury Shearers' and Shed Hands' Union and the Canterbury Sheepowners' Union of Employers:—

"The court has carefully considered the question, and has come to the conclusion that owing to variation in soils, feed, climatic and weather conditions, classes of sheep, the nature of the crutching required by the owner, &c., it would be unfair to both employers and workers to fix a flat rate for crutching. We are of the opinion that the difficulty might be got over by means of a classification, but we have not the necessary material to enable us to make a classification. A somewhat similar difficulty presents itself in connection with the machine experts. We have therefore decided to recommend parties to discuss the matter in conference in connection with the present shearers' dispute, with a view to having shearers, crutchers, machine experts, and shed hands included in one award. This has been done in Australia, and the union's representative indicated in his address to the court that it would be desirable to have one award in New Zealand. The court is prepared to consider the matter further when dealing with the shearers' dispute."

The Shearers' and Shed Hands' Union has asked the Arbitration Court to make a Dominion award covering crutchers, shearing machine experts, and shed hands. Nine shillings per 100 was asked for crutching, or a day rate of 30s., with rations; for shed hands £4 per week, with rations, without, 25s. per week additional; for shearing machine experts, £5 to £7 per week; first-class fare from place of engagement to shed, and 10s. per day travelling expenses.

For the owners, it was contended that crutching should be done at 4s. to 5s. per 100; at that rate it meant over £7 per week to the worker. If an award were made for a high rate the owners would not have the work done. The result would be that the men would be out of employment. Southern farmers stated that the highest rate paid for crutching should be £5 per week and found. An instance was given of a man making £23 in thirteen days. It was impossible to frame a general award owing to the varying conditions throughout the Dominion.

New South Wales P.P. Boards. Annual Convention.

The annual conference of the New South Wales P.P. Boards was held in Sydney last month, the gathering being opened by Mr. P. F. Loughlin, Minister for Lands. In regard to the amended P.P. Act, he said he was not altogether satisfied that in its present form it was destined to do all that it set out to do. The Act authorised the Lands Department to hand over to the P.P. Boards certain stock routes and reserves. There seemed to be a disinclination on the part of some boards to take them over. It would be necessary to gazette the handing over of these routes and reserves to boards. The Lands Department would, upon the request of the boards, promptly cancel short-term leases of routes and reserves they desired terminated. This, obviously, could not be done in the case of improvement and scrub leases. Any proposition for the leasing of stock routes could not be entertained, for, if they were not required for travelling stock, they were not needed at all. Exceptions might be made in exceptional circumstances, such as the granting of grazing permits on routes infested with prickly pear.

The chairman, Mr. F. A. Mackenzie, in his presidential address, reviewed the difficulties that the pastoral industry had laboured under in the aftermath of the drought and the disorganisation of the markets for the products, and went on to refer at length to a phase of the administration of the Amended P.P. Act. The Minister for Lands, he said, in claiming the right to collect rent for his department for reserves gazetted as being under the control of the P.P. Boards, had reduced the long-delayed measure to only half a measure. The boards were robbed of the necessary control of reserves, and, practically, they would have to set out again to obtain what the Act purported to give them. They could only conclude that all concerned were the victims of a

blundering official system which insisted on absolute power to control country affairs being centralised in Sydney.

A number of important resolutions were carried at the conference, chief among them being the following:—

"That a new section or sub-section be added to the sections dealing with travelling stock in or to the following effect, viz.:— 'Every drover delivering travelling stock or placing travelling stock on a run in any district other than that from which such stock were removed shall hand to the person to whom the stock have been delivered the permit under which they travelled, and within forty-eight hours thereafter the person receiving such permit from the drover shall forward it by registered post or deliver it personally to the stock inspector for the district in which the travelling stock are located.'"

"That the Pastures Protection Act be amended with a view to making (a) the Water Conservation and Irrigation Commission, (b) the Railway Commissioners, (c) Aborigines Protection Board, (d) Inspector-General of Police, (e) Forestry Commission, respectively, responsible for the destruction of rabbits, on any lands vested in or under the control of such bodies."

"That the Government subsidise P.P. Boards, pound for pound, for the purpose of conserving water on travelling stock reserves."

"That this convention is of the opinion that the powers held by the shire and municipal councils to enforce the destruction and eradication of all noxious weeds and plants should be vested in the Pastures Protection Boards."

"That this conference recommends that in future when subdivisions of Crown lands are taking place provision be made that the routes under consideration be left not less than 5 chains wide, and when routes have been chartered the portions under P.P. Board control, and portions under shire council's control, be clearly defined."

"That this convention consider that it should be made compulsory that ears be left on all sheepskins, as a big help to detecting crime."

"That the Minister for Lands be urged to supply barbed wire to land owners, for use in the erection of rabbit-proof netting fences on the same easy terms as wire netting and plain black wire is supplied."

"That the owner or occupier and adjoining owner or occupier, on the external boundaries of any holding on which there is a rabbit-proof fence, shall destroy the rabbit harbour and keep same clear, continuously, to the extent of not less than one chain on either side."

"That when it is the intention of an owner or occupier to erect a rabbit-proof fence, that the adjoining owner or occupier without hindrance shall permit an owner or occupier or his servants, to enter on his property and do all that is necessary in the matter of clearance along the line for the purpose of erecting a rabbit-proof fence."

"That where a person is desirous of erecting a rabbit-proof fence on a boundary line, that before doing so he or she shall give at least one month's notice, in writing, to be served personally or by registered letter, to the adjoining owners that it is his or her intention so to do."

"That where it is desired by an owner or occupier to make an old boundary fence, either whole or in part, rabbit-proof, that before commencing upon such work he or she shall give at least one month's notice, in writing, to be served personally or by registered letter, on the adjoining owners that it is his or her intention so to do."

Publications Received.

Monthly Abstract of Statistics for April from New Zealand Government Statistician.

The Commonwealth Trade Alphabet, issued by Mr. R. Westfield under the patronage of the New South Wales Public School Teachers' Federation, is to hand. While mainly an advertising scheme, the booklet lays special emphasis upon the primary industries of the country. We notice that the Graziers' Association of New South Wales has contributed a page illustrating wool growing and manufacture.

Tatterdemalion, by John Galsworthy (London: William Heinemann; price 7s. 6d. net). The "finish," which we usually associate with Mr. Galsworthy's works, seems somewhat lacking in this collection of short stories and sketches, possibly because we presume they were written in the scanty leisure hours from the author's war work. Nevertheless, they are typical tales by a writer who has been described as "one of the best and bravest minds of our times." Mr. Galsworthy faces the facts of life squarely; he sees the sordidness in many things, but looks ahead, and is not afraid to worship beauty and to be an idealist.

Publishers' Department.

THE AUSTRALIAN PASTORAL COMPANY, states a cable, has declared an interim dividend of 3 per cent., tax free.

THE SOUTH AUSTRALIAN LAND, MORTGAGE AND AGENCY COMPANY made a profit for the year of £16,670, and declared a dividend of 7½ per cent., the sum of £6237 being carried forward.

The accounts for WRIGHT, STEPHENSON AND CO. LIMITED show a credit balance of £83,049 for the past year. A dividend of 7 per cent. is being paid. Mr. J. A. Johnstone and Mr. P. C. Gray have been re-elected directors.

THE MELBOURNE TRUST LIMITED show a net profit of £26,106 for year ending 31st December, 1920, as against £31,451 for the preceding year. A dividend of 8 per cent., less income tax of 3s. 4d. in the pound, is declared.

BURNS, PHILP AND CO. LIMITED, in their annual balance-sheet, show that the receipts of the company exceeded £10,000,000, upon which a net profit of 1½ per cent. was made as compared with an average of 2½ per cent. for the preceding five years.

WILLIAM ADAMS AND CO. LIMITED, with branches in all the principal cities of the Commonwealth, advertise the Sentinel steam waggon. It burns coke, coal, or charcoal, is easily operated by one man, and costs only half as much to run as a petrol lorry of equal capacity.

THE "DIGGER" WINCH, a one-man, powerful and speedy tree and stump puller, of Australian manufacture, is advertised in The Review. It is made by Quick Gears Prop. Limited, 75 Penders-street, Thornbury, near Melbourne. Full particulars as to prices appear in the notice.

GOLDSBROUGH, MORT AND CO. LIMITED made a net profit of £61,410 for year ending 31st March, 1921. The annual meeting of shareholders will be held on 24th June. The dividend for the year amounted to 10 per cent., and the balance carried forward into next accounts is £11,466.

The directors of THE BANK OF NEW SOUTH WALES have decided to not only pay the usual dividend at the rate of 10 per cent. per annum, but also to give a bonus of 10s. per share on a share issue of 248,260 shares. This will require £124,134. The net profit for the past six months amounts to £403,932, against £304,219 for the corresponding period of 1920.

GARDINER AND NAYLOR PROP. LIMITED, domestic engineers, advertise that they are prepared to install and advise on all matters affecting water supply, sanitation, ventilation, heating and lighting of station properties and buildings in any State. The firm's office and address is 34 Queen-street, Melbourne, and the works are located at 205 Latrobe-street, Melbourne.

The accounts of HOULDER BROS. AND CO. LIMITED show a credit balance of £146,091 for the year ending 31st December last. To this has to be added £18,583 brought forward, making a total of £164,675. A final dividend of 5 per cent. is being paid, which added to the payment in July makes the total return to shareholders for the year 10 per cent. The amount carried forward into next account is £13,550.

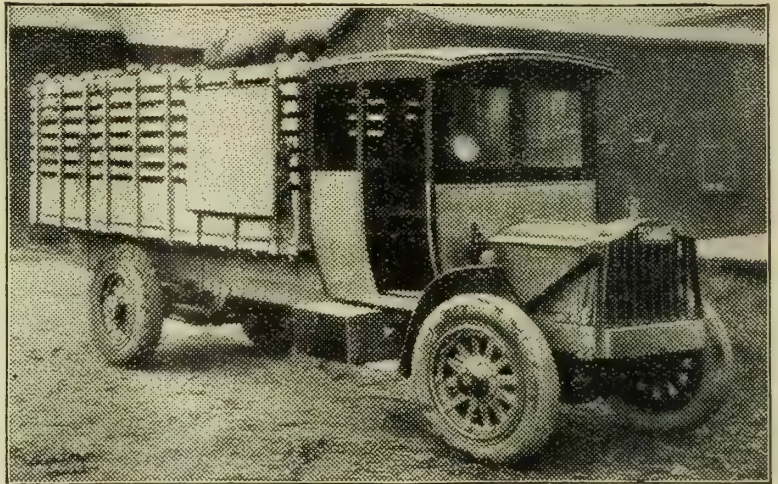
Moline Tractors.

We understand that the Moline tractor, which proved such a success in Great Britain during the war, is about to be demonstrated and placed on the market in this country. No doubt many of our readers who were at Home during the strenuous days of three, four and five years ago will remember seeing this wonderfully effective two-wheel tractor at work in the fields. The Government alone had in operation 2000, and although conditions here are not the same as in England there seems to be no reason why the machine should not do as good work on this side. Mr. C. E. Moore, the factory representative of the manufacturers, the Moline Plow Co., of Moline, Ill., U.S.A., is at present in New South Wales, where the first public demonstration is shortly to take place. Brown & Dureau Ltd. have been appointed sole Australian agents for the machine and all agricultural implements they make, in addition to the Stevens Sallent Six motor car, also turned out by the firm.

The Motor Lorry on the Farm.

The location of the farm is the primary consideration in estimating the value of a motor lorry. Horses would not average much more than 3 miles an hour. They would make a round trip of 18 miles in 6 hours, whereas a motor lorry, under the same conditions, would easily average 9 miles an hour, and it would require two hours for the round trip. Four hours saved on the one trip!

On every farm there are a hundred or more odd jobs to be done—many of them, with the aid of a motor lorry, can be completed by the time it takes to hitch up a team of horses. In the United States it is estimated it takes about 5 acres of land to support a horse for one year. On an equality basis, every farmer can figure how many of his acres of land he works to keep his horses going. If a horse is a money-making proposition



on a farm it would be foolish, of course, for the farmer to change to another hauling method unless absolutely satisfied that the new method will prove more profitable. As in every other investment, the kind of lorry to be purchased should be determined, not so much on the basis of original investment, as upon the final cost of operation of the lorry per ton-mile. Only such a lorry should be purchased that will insure reliability and economy of operation over a long term of years, at least, ten to fifteen years, and in addition one that will insure freedom from worry and frequent breakdowns.

The factor of safety in operating a motor lorry is absolutely essential. This is best assured by purchasing a machine made part by part by one manufacturer so that the whole is a complete unit, designed for one particular purpose and to meet local requirements. Transportation engineers should be consulted, if possible, before a lorry is bought.

Artesian Boring Notes.

NEW SOUTH WALES.

Bores under construction 1st June, 1921:—

Government.—Burren No. 2.—1570 ft. in sandstone; increase in flow at 1550 ft.

Private.—Dunumbral 2.—2640 ft. in sand; increase in flow at 2635 ft. Mogil.—2947 ft. in shale.

QUEENSLAND.

A flow has been struck in Saxby bore, Richmond district.

A subartesian bore in Crendon selection, Kynuna, was stopped at 1010 ft., with the poor supply of 4000 gals. It was a test bore, and will probably be deepened.

A plant is being erected at Capt. Richards' selection, near Kynuna, to deepen a bore from 800 ft. to 2000 ft. Another plant is working on Gallipoli selection, Elderslie resumption. An adequate supply was struck in another bore on Elderslie.

A second bore has been completed on Bladensburg, Winton district, an unlimited supply of fresh water being tapped at a depth of 793 ft. The water rose to within 98 ft. of the surface. The site was selected with a divining rod. The plant is sinking another bore with good indications.



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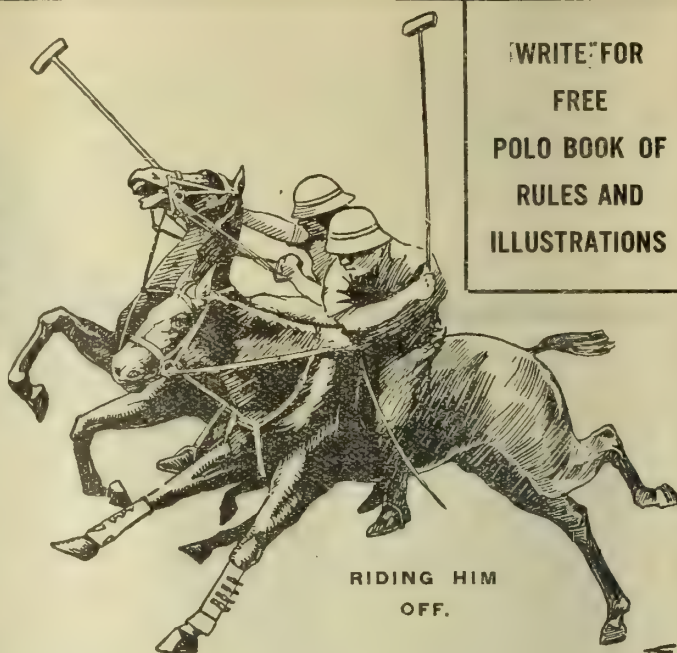
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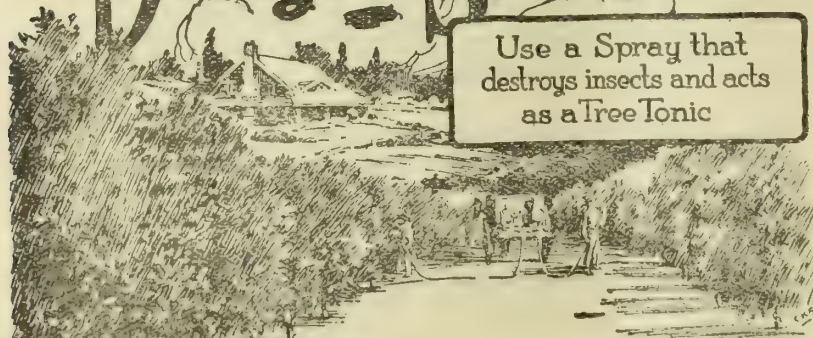
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By following out your instructions, I have no trouble with the mixing of this oil.

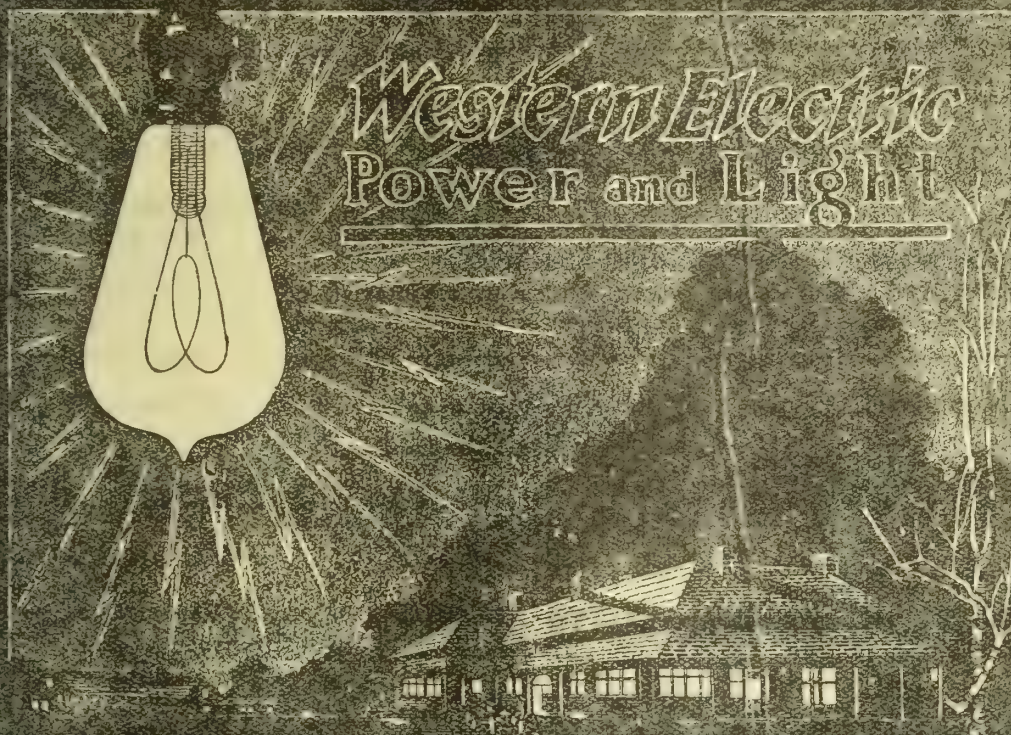
(Signed) SYDNEY W. SNELL,
Manor Grove, Frenchman's Creek,
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destroyer of Aphis, Scale, Red
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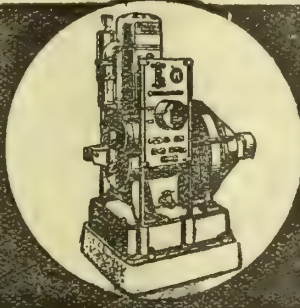
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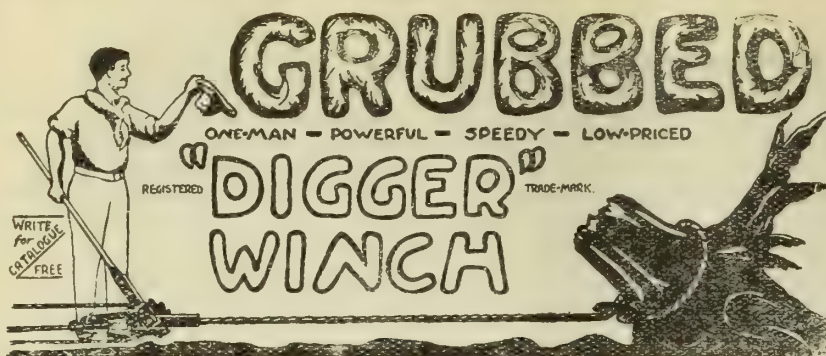
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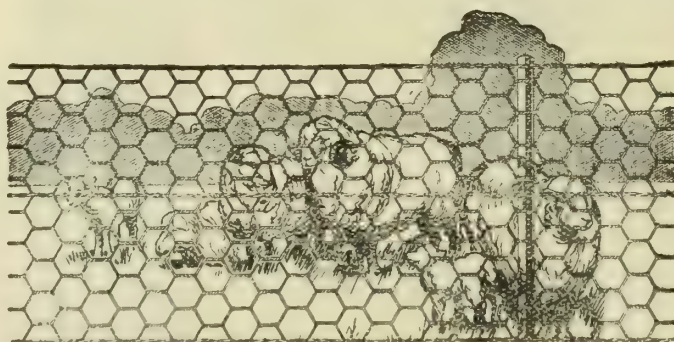
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Just as effective as the "Titan." The "Triplex" is a permanent fixture on the fence. Whenever the wire slackens, all that is necessary is a few turns and it is taut again. Very powerful.

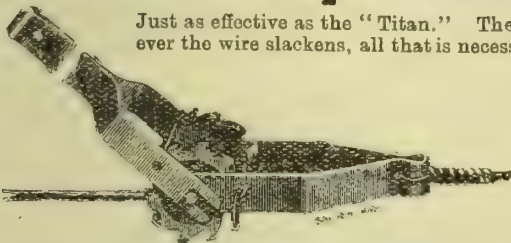
Saves wire. Saves posts.

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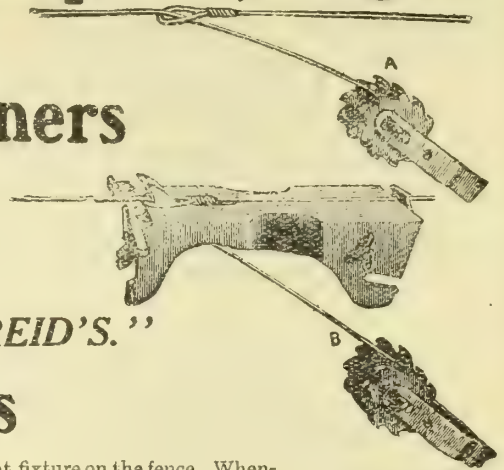
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RYLANDS BROTHERS LTD.

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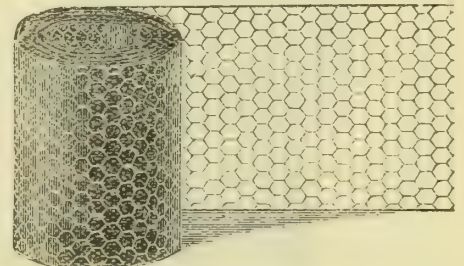
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Best in the trade. True to Size and Shape of mesh
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THE ignition created by Champion Dependable Spark Plugs is certain, sure and invariable at all times, in all climes and under the most exacting conditions.



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CHAMPION Dependable Spark Plugs are built for "gruelling work." They place you out of reach of spark plug troubles. Functioning efficiently under excessive heat, shocks, and changes of temperature they can be relied upon to the limit.

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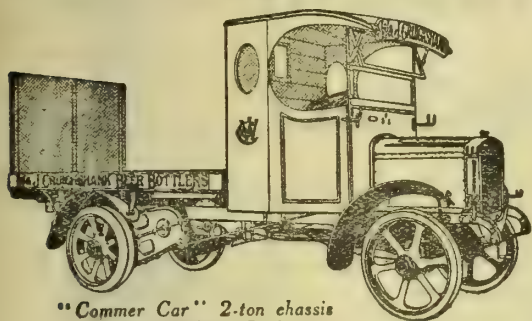
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"Commer Car" 2-ton chassis
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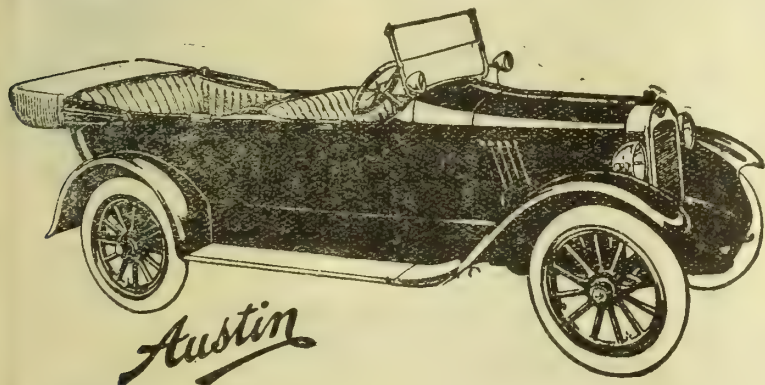
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Not only are Austins light on petrol and tyres but they are economical. Because of the high-grade British materials and workmanship their repair bills are extremely low, thus assuring continuous service—a point that is appreciated by owners who are miles away from mechanical aid.

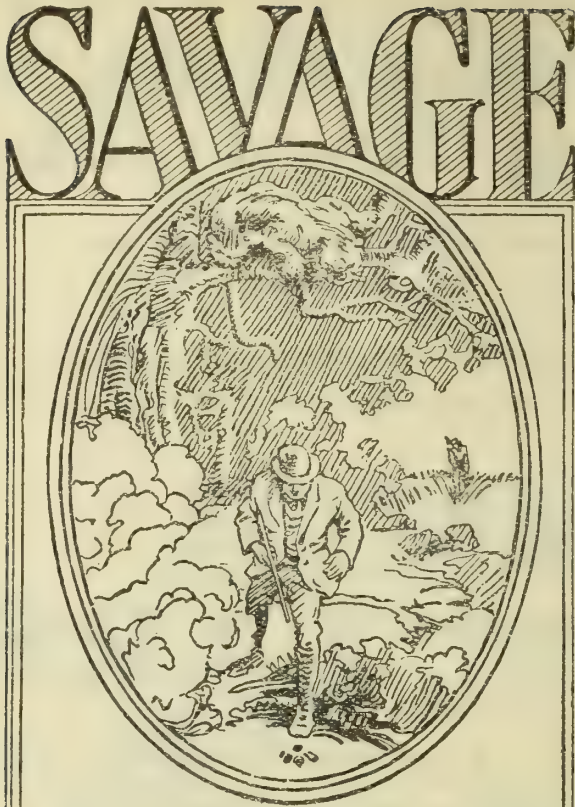
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Haul by Motor Lorry - - It's Cheaper.



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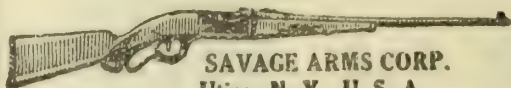
Stealthily, slinking along—his soft padded paws making him practically silent in his progress—the dim shadows of thick foliage blending in with his hide render him a thing invisible. A lithe, quick spring, and he's gone!

Instant death!—at one hundred yards. Your "Pard" has saved you—and it's 10 to 1 it was a Savage High Power that he did it with. But for the accuracy of that bullet traveling at the rate of 3000 ft. per second you would be dead.

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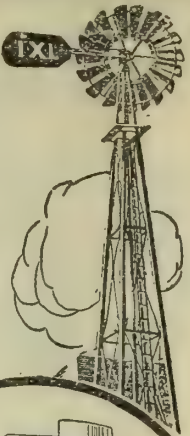
Savage High Power Rifles are chambered in .22 Hi-Power, .250-3000, .30-30 and .303. Ask your dealer to show them to you.

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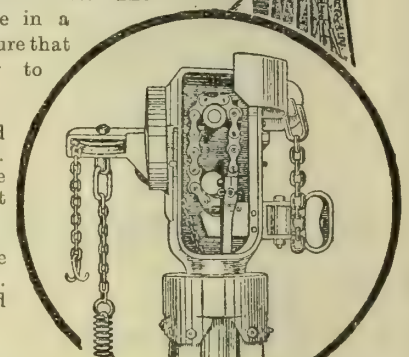
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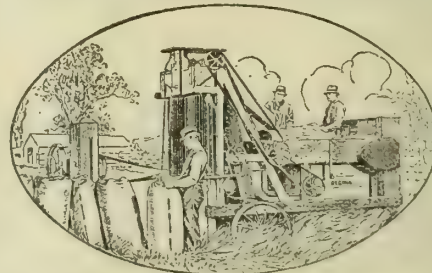
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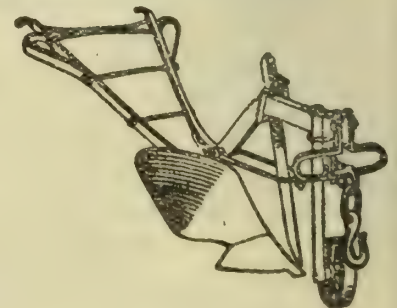
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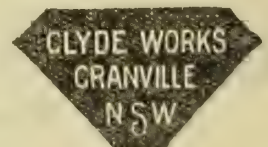


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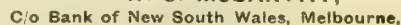
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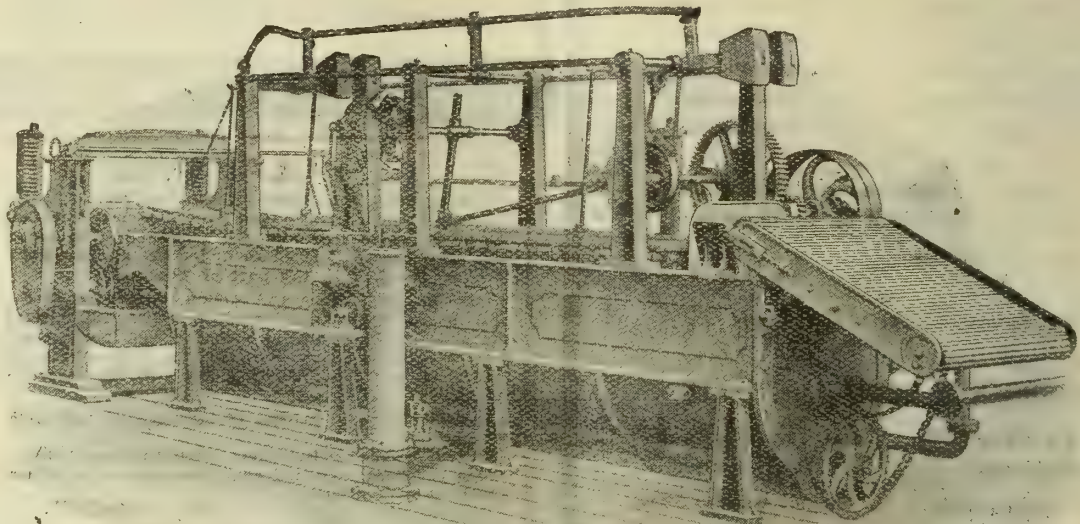
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21-ft. Harrow Type Bowl, Automatically Self-cleaning.

The machine illustrated represents the greatest advance made in Wool Washing Machinery for many years. By simple automatic means it maintains its scours always in their most effective condition, and at the same time regularly discharges all precipitated dirt.

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Our Booklet No. 191 describes the machine in full. May we send it to you?

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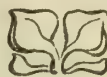
LIVERPOOL, MANCHESTER and BIRMINGHAM.

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Advantages.—The C.C. & D. Co. Ltd. have complete control over the handling and examination of Consignments, and make a special feature of the Country Trade.

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We are one of the largest distributors of Colonial Produce in Great Britain, and being a **Commission House** only are in a position to give our sole attention to **Shippers' interests**, having no holding of our own in produce or meat works. With our numerous Branches and large organization we are in the **best possible position** to give the benefits of **all markets** to our Shippers. We have separate departments for **Frozen Meats, Canned Goods, Tallow and Fats, and Dairy Produce.**

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**Frozen & Canned Meat, Wool, Pelts, Tallow, &c.
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Stock purchased at per head.

Stock purchased at per lb. Consignments of Frozen Meat undertaken on growers' account.

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TELEGRAMS—EWTADAMS MELBOURNE.

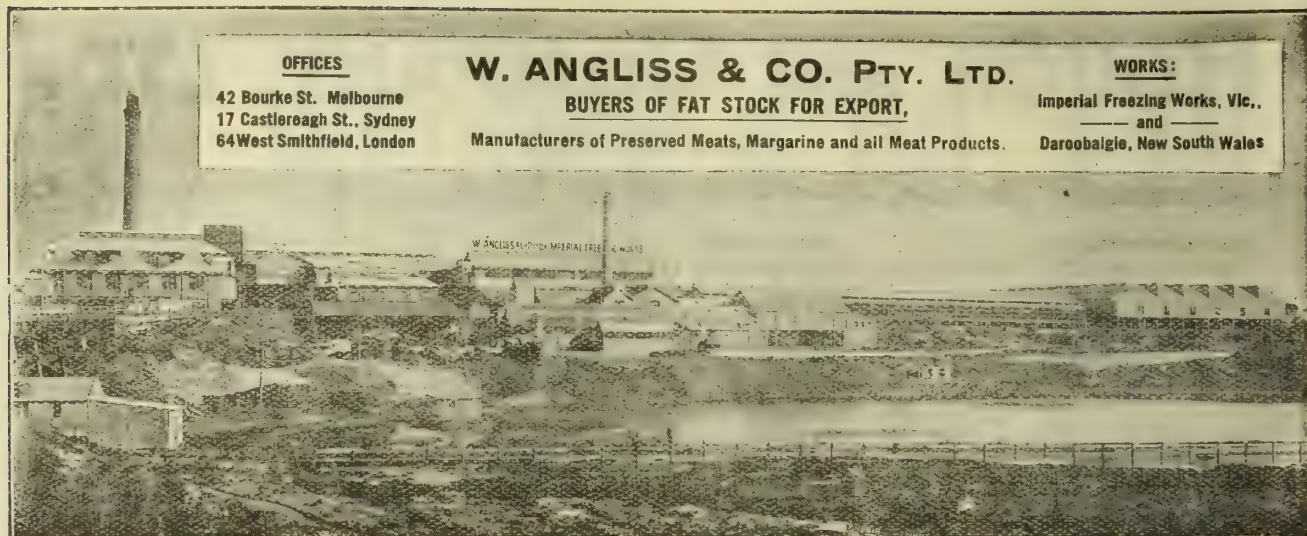
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PIGS**

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Stock purchased at per Head or at per lb.

Stock TREATED & FROZEN on Owner's account.

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All descriptions of Stock frozen on account
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If your **Sheep** are not doing well,
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It is **TONIC & VERMIFUGE** and is highly recommended by a number of well-known practical pastoralists. Sold only in $\frac{1}{2}$ -gallon Jars (concentrated), each containing 1600 full doses.

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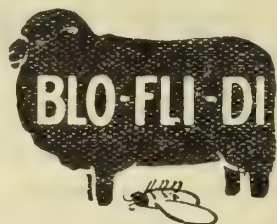
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W. G. BROWN, State Sheep and Wool Expert, and Member of the
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				£13,355,400

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42 in Victoria	3 in Fiji
6 in South Australia	2 in Papua
11 in West Australia	1 in London

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1st January, 1921.

Governor.

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The Largest and Most Successful Mutual Life Office in the British Empire.

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Accumulated Funds £44,000,000.

Annual Income nearly £6,375,000

The Cash Bonus divided for 1920, including Interim Bonuses, was ... £1,336,402

Total Bonuses distributed ... £25,800,000

SOCIETY IS PURELY MUTUAL.

The whole of the cash surplus is divided among the participating Policyholders each year. Assurances can be effected for any sum from £5 upwards. Write for full particulars.

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THE UNION BANK OF AUSTRALIA LIMITED

ESTABLISHED 1837.

INCORPORATED 1880.

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Paid-up Capital ... £2,500,000

Reserve Liability of Proprietors 5,000,000

Reserve Fund ... 2,630,000

Together ... £10,130,000

Head Office—71 Cornhill, London, E.C. 3.

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General Manager—ALFRED H. CHAMBERS.

Chief Inspector—H. C. SKEET.

INSPECTORS—W. A. Lelitch, C. G. Ogilvie, G. W. Richmond, J. Salmond.

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Collingwood
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Moonee Ponds
Newmarket
Prahran
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Bairnsdale
Ballarat
Bendigo
Camperdown
Casterton
Clunes
Cohuna
Colac
Daylesford
Dimboola
Donald
Geelong
Hamilton
Horsham
Kerang
Kyabram
Loch (Rec. Office at
Poowong)
Marnoo

Maryborough
Minyip
Orbost
Portland
Rochester
Rupanyup
Shepparton
Stawell
Tarnagulla (Rec. Of-
fices Newbridge and
Laanecoorie)
Toora
Traralgon
Wangaratta
Warracknabeal
Warrnambool
Yarram Yarram

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George St.
Haymarket
Newtown
Oxford Street
Albury
Barellan
Berrigan

Broken Hill
Burrowa
Canowindra
Casino
Cessnock
Cootamundra
Covra
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Grenfell
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Island)
Laura

Maitland
Millicent
Moonta
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Office at Tanta-
noola)
Naracoorte (Rec. Of-
fice at Kingston)
Port Adelaide
Port Pirie
Victor Harbour
(Port Victor) (Rec.
Offices at Goolwa
and Port Elliot)

TASMANIA.

HOBBART
Burnie
Launceston
WESTERN AUSTRALIA.
PERTH
Aberny (King George's
Beverley [Sound])
Broome
Broomehill
Bunbury
(Rec. Office at Capel)
Carnarvon
Fremantle (Bay
Geraldton (Champion

Goomalling
Kalgoorlie
Katanning
Meckering
Narrogin
Northam
Pingelly
Port Hedland
Roebourne
Wagin
York

NEW ZEALAND.

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Ashburton
Auckland
Newton
Blenheim
Buckley (Tolaga Bay)
Christchurch
Dannevirke
Dargaville
Dunedin
Feilding
Geraldine
Gisborne
Gore
Greymouth
Hamilton
Hastings
Helsville

Hunterville
Invercargill
Kaikohe
Lyttelton
Martinborough
Masterton
Napier
Nelson
New Plymouth
Oamaru
Ohura (Rec. Office at
Matiere)
Opotiki
Otorohanga
Pahiatua
Palmerston North
Rangiora
Stratford
Taneatua (Rec. Off.
at Waimana)
Te Araroa
Te Awamutu
Te Kuiti
Te Puke (Rec. Office
at Matata)
Timaru
Waimate
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The Pastoralists' Association of Victoria

OFFICE: THE RIALTO, 497 COLLINS STREET, MELBOURNE.

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Treasurer—GEO. L. AITKEN.

Full information as to membership and objects of the Association will be furnished to intending members on application to—
Telephone (5234 Central). LESLIE SMITH, Secretary.

The Pastoralists' Union of Southern Riverina

Office: The Rialto, 497 Collins St., Melbourne.

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SUBSCRIPTION.—Each member shall pay an annual subscription on the following scale:—Owners of 2000 sheep or under, £1; owners of any number over 2000 sheep, 10s. per 1000 sheep or part thereof; owners of cattle shall pay on the basis of 8s. per 100 head or part thereof.

R. H. CALDER, Secretary.

GRAZIERS NOTE!



Map of New South Wales shewing the locations of the Sheds handled by the Company.

What YOUR OWN Company has done in its First Two Seasons—

94 SHEDS

Totalling 1,591,871 Sheep

The following are two resolutions that were passed by large meeting of Graziers, held at Uralla, in January, 1921:—

- (1) That this meeting had great confidence in the Company.
- (2) That the New England district would continue to support the Company, and hoped the rest of the State would do the same.

**WRITE AT ONCE
re 1921 SHEARING**

TO THE MANAGER

The Graziers' Co-operative Shearing Co. Ltd.
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The Rules of this Association are substantially the same as those of Victoria, New South Wales and Queensland.

J. A. RILEY, Secretary.

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Warrego Graziers' Association
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Maranoa Graziers' Association
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" "
Graziers' Association of S.E. Q'land
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" "
S.W. Q'land Graziers' Association
" "
" "

The United Graziers' Association of Queensland is a Council constituted by the affiliation of five separate Graziers' Associations in Queensland. It has no direct membership with the individual Grazier, but individual membership with an affiliated District Association carries with it collective membership with the United Graziers' Association of Queensland.

FREDK. RANSON, SECRETARY.

The Graziers' Association

of New South Wales

(INDUSTRIAL UNION OF EMPLOYERS).

Office: New Zealand Insurance Buildings, 79 Pitt St., Sydney.

Telegraphic Address: Graziers, Sydney.

Telephone No. City 4567.

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Trustees—D. CARSON and W. F. JAUQUES.

Vice-President—JOHN MACKAY.

Treasurer—C. M. BUCK.

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Secretary—J. W. ALLEN.

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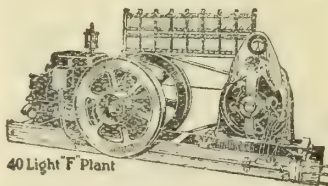
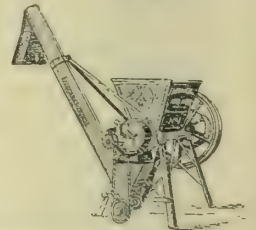
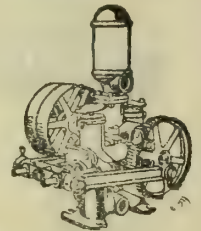
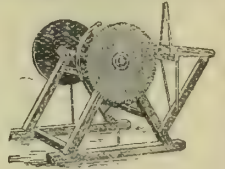
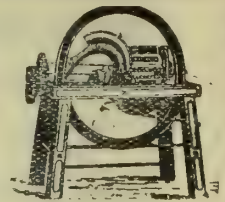
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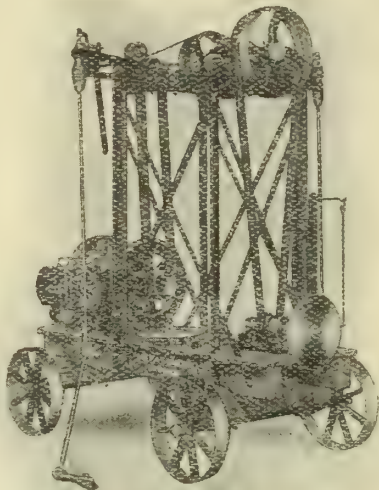
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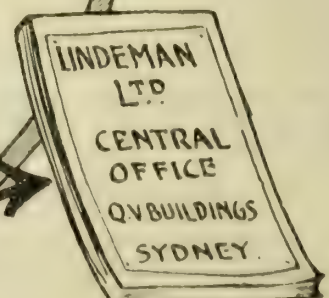
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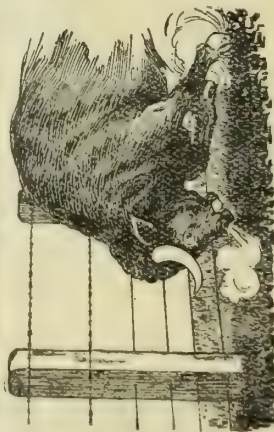
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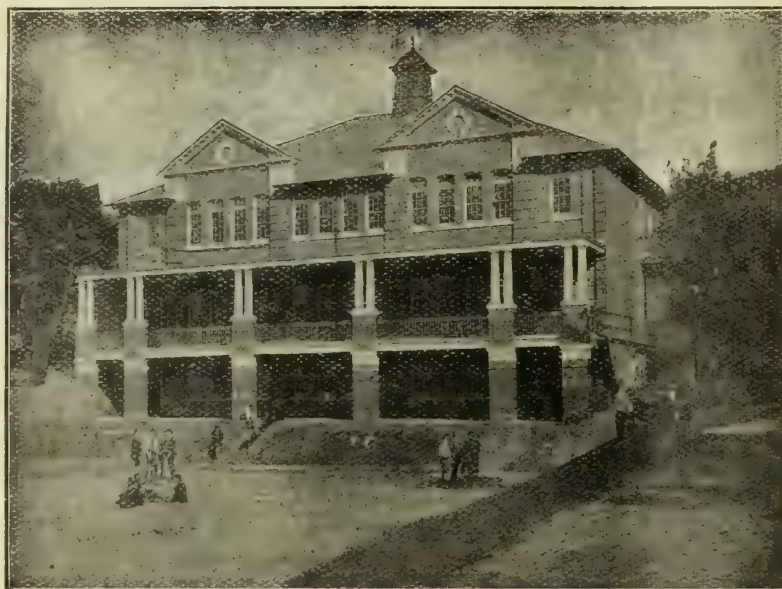
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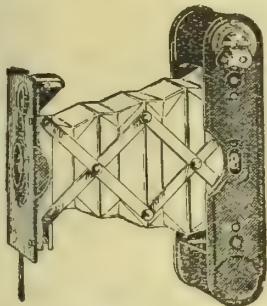


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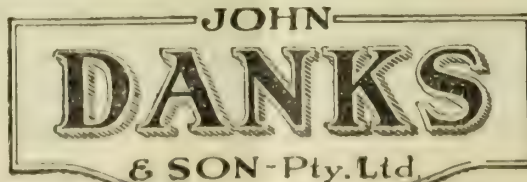
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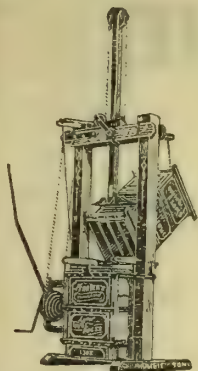
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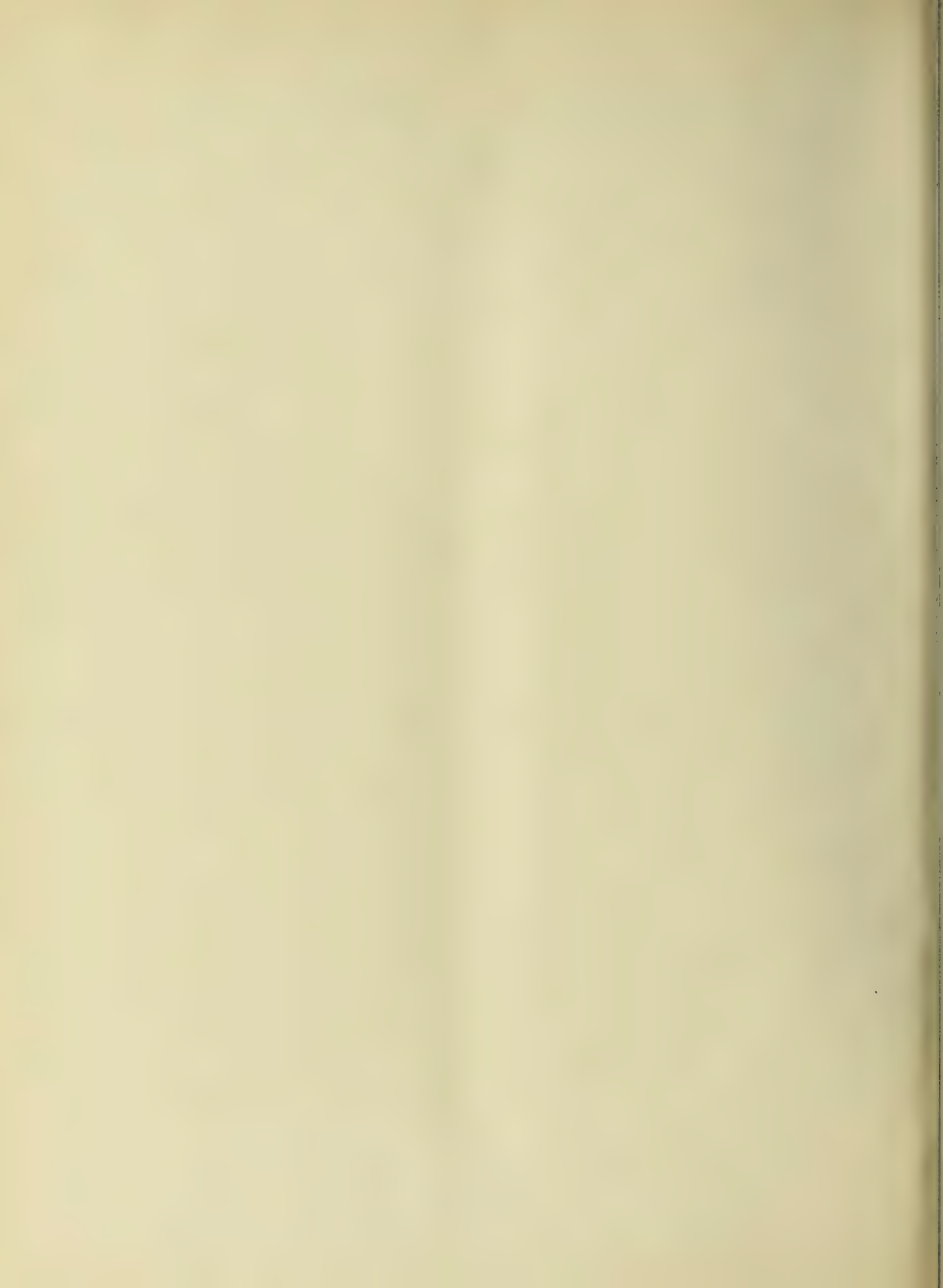
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